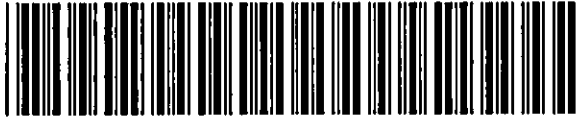


**\*248IHSSF1081\***



**DocumentID**    **NONCD0002901**

**Site Name**        **PITT COUNTY SCHOOL BUS GARAGE**

**DocumentType**   **Correspondence (C)**

**RptSegment**      **1**

**DocDate**          **9/1/1998**

**DocRcvd**          **2/20/2007**

**Box**                **SF1081**

**AccessLevel**      **PUBLIC**

**Division**          **WASTE MANAGEMENT**

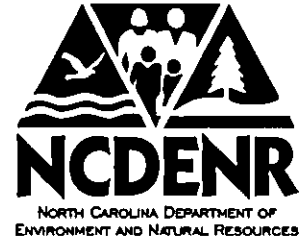
**Section**           **SUPERFUND**

**Program**           **IHS (IHS)**

**DocCat**            **FACILITY**

State of North Carolina  
Department of Environment  
and Natural Resources  
Washington Regional Office

James B. Hunt, Jr., Governor  
Wayne McDevitt, Secretary



**DIVISION OF WASTE MANAGEMENT  
UNDERGROUND STORAGE TANK SECTION**

September 1, 1998

**CERTIFIED MAIL**  
**RETURN RECEIPT REQUESTED**  
Z 026 460 217

Mr. John Staley, III  
Pitt County Schools  
Environmental Department  
P.O. Box 1089  
Winterville, North Carolina 28590

RECEIVED/DEIR  
DWM UST SECTION  
98 SEP -2 PM 1:17

**RE: Notice of Regulatory Requirements**  
15A NCAC 2L .0115(I)  
**RISK-BASED ASSESSMENT AND CORRECTIVE ACTION**  
**FOR PETROLEUM UNDERGROUND STORAGE TANKS**  
**Pitt County Schools - Bus Garage Facility**  
901 Mall Drive  
Greenville, Pitt County, North Carolina  
UST Incident Number: 11242 (merged with 5536)  
Low Risk Classification

Dear Mr. Staley:

Chapter 143, North Carolina General Statutes, authorizes and directs the Environmental Management Commission of the Department of Environment and Natural Resources to protect and preserve the water and air resources of the state. The Division of Waste Management has the delegated authority to enforce adopted pollution control rules. This letter is a standard notification and is intended to advise you, as the owner and/or operator of the underground storage tank (UST) system at the subject site, of your legal requirements under North Carolina statute.

This office received your Comprehensive Site Assessment on July 6, 1995, which was before the effective date (January 2, 1998) of the risk-based rule (15A NCAC 2L .0115). The submitted report meets the requirements of 15A NCAC 2L .0106(c) and (g). Pursuant to 1995 (Reg. Sess., 1996) c.648, s.1 (Senate Bill 1317), the discharges or releases at the above-referenced site were designated as Class CDE. In accordance with 15A NCAC 2L .0115(r), this site is now classified as low risk. As a responsible party, you are obligated to notify the Department of any factors that might affect the level of risk assigned to this discharge or release.

If contaminated soil has not already been remediated to the cleanup levels established in the March 1997 *Groundwater Section Guidelines for the Investigation and Remediation of Soil and Groundwater*, you must submit a Soil Cleanup Plan and schedule in accordance with the January 1998 *Groundwater Section Guidelines for the Investigation and Remediation of Soil and Groundwater, Volume II* ("the Guidelines"). The Guidelines are available on the Internet at <http://gw.ehnr.state.nc.us/INDEXOLD.HTM> or may be purchased from the Groundwater Section for a fee of \$7.00. To purchase a copy of the Guidelines, please send a check made payable to DENR to:

DENR/DWQ/Groundwater Section  
Pollution Control Branch  
P.O. Box 29578  
Raleigh, NC 27626-0578

The Soil Cleanup Plan must be received by this office within **60 days** of the date of receipt of this notice\*. Pursuant to 15A NCAC 2L .0115(I) and 15A NCAC .0115(r) soil contamination must be remediated to:

- (1) Soil cleanup levels established in the March 1997 *Groundwater Section Guidelines for the Investigation and Remediation of Soil and Groundwater*.

A responsible party who submits a Soil Cleanup Plan that proposes to remediate soil contamination to a standard other than the residential or soil-to-groundwater maximum contaminant concentrations established in 15A NCAC 2L .0115(m), whichever are lower, must provide public notice as specified in 15A NCAC 2L.0115(j). No public notice is required if soil is to be cleaned up to the soil cleanup levels established in the March 1997 *Groundwater Section Guidelines for the Investigation and Remediation of Soil and Groundwater*.

Once soil contamination is remediated, you are required to submit a Soil Cleanup Report with Site Closure Request (See the January 1998 Guidelines for report format). This report shall demonstrate that soil contamination was remediated to the cleanup levels specified above. A time frame for submittal of a Soil Cleanup Report with Site Closure Request must be included in the schedule submitted with the Soil Cleanup Plan.

Please note that for reimbursement from the Commercial or Noncommercial Leaking Petroleum Underground Storage Tank Cleanup Funds, the responsible party must demonstrate in accordance with 15A NCAC 2P .0402 that soil was remediated in the most reasonable and cost-effective manner.

Mr. Staley

September 1, 1998

If soil contamination was remediated prior to the date of receipt of this notice, you are required to submit a Soil Cleanup Report with Site Closure Request. This report shall demonstrate that soil contamination was remediated to the cleanup levels specified above. The Soil Cleanup Report with Site Closure Request must be received by this office within **60 days** of the date of receipt of this notice, if applicable.

Your prompt attention to the items described herein is required. Failure to comply with the state's rules in the manner and time specified, may result in the assessment of civil penalties and /or the use of other enforcement mechanisms available to the State. Each day that a violation continues may be considered a separate violation.

Also note that performing assessment and cleanup work that is not required under 15A NCAC 2L.0115 is not reimbursable from the Commercial or Noncommercial Leaking Petroleum Underground Storage Tank Cleanup Funds.

If you have any questions regarding the actions that must be taken or the rules mentioned in this letter, please contact me at (252) 946-6481, extension 219. If you have any questions regarding trust fund eligibility or reimbursement, please contact the UST Section at (919) 733-8486.

Sincerely,



David May, G.I.T.  
Hydrogeological Technician II

cc: GMA - 222-C Cotanche Street, Greenville, NC 27858  
Pitt County Board of Education - 1717 West 5<sup>th</sup> Street, Greenville, NC 27834  
Pitt County Health Department - Dr. John Morrow, 201 Government Circle, Greenville, NC 27834  
Bill Reid - Central Office ✓  
WaRO

\*If the responsible party is seeking reimbursement from the Leaking Underground Storage Tank Cleanup Funds, pre-approval request forms should be submitted prior to developing any Soil Cleanup Plan. Therefore, the responsible party must apply for trust fund pre-approval, obtain pre-approval and submit the Soil Cleanup Plan within the time specified.



1  
State of North Carolina  
Department of Environment, Health and Natural Resources  
Northeastern Region  
1424 Carolina Avenue, Washington, North Carolina 27889

James G. Martin, Governor  
William W. Cobey, Jr., Secretary

15  
Lorraine G. Shinn  
Regional Manager

DIVISION OF ENVIRONMENTAL MANAGEMENT

January 16, 1990

Mr. Thomas V. Taylor, P.G.  
Omni Environmental Services, Inc.  
Post Office Box 14001  
Research Triangle Park, N.C. 27709

Re: Pitt County Public Schools Disposal Site  
Proposed Phase I Work Plan  
Omni Project No. 89-61-151-01

Dear Mr. Taylor:

This office has reviewed the work plan received on December 18, 1989, for the above named project. The following paragraphs are pertinent to our review:

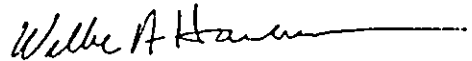
We recommend that a minimum of three (3) groundwater samples be collected from boreholes constructed around the disposal area (1, upgradient of anticipated groundwater flow; 2, downgradient). Two (2) of the groundwater samples should be obtained from those two (2) boreholes identified as having the highest volatile organic compounds (VOC) as mentioned in Step Two. The use of the HNU photoionization meter is acceptable for conducting a preliminary assessment to determine potential contamination. However, contamination, if any, must be quantified and qualified by laboratory analysis. The analysis specified in Step Two of the plan should be adequate to determine any impacts to the soils and/or groundwater around the disposal area.

Mr. Thomas V. Taylor  
Page 2  
January 16, 1990

In general, the proposed plan appears to be adequate; thus, the Groundwater Section has no objection to the Phase I work plan. The report generated from Step Three will be reviewed by our office. The report must be accompanied by all analytical reports, description of soils, location maps and all other relevant information. If the report indicates contravention of Groundwater Quality Standards (N.C.A.C. 2L), further investigation and/or remediation may be required and/or our office may recommend Enforcement Action to the Office of General Counsel.

Should you have any questions, please contact Mr. Richard Powers or me in the Washington Office.

Sincerely,



Willie A. Hardison  
Hydrogeologist

WAH:ekw

cc: Alton Hodge  
Jim Mulligan  
Vic Copelan  
John McKnight

*Richard  
Please respond to the proposal  
and also advise them that we  
are not the EPA.  
Thanks  
RS  
11/15/89*

RECEIVED  
WASHINGTON OFFICE

NOV 15 1989

D. E. M.

## Pitt County Schools

1717 WEST FIFTH STREET  
GREENVILLE, NORTH CAROLINA 27834

Edwin L. West, Jr.  
Superintendent  
(919) 830-4200

November 10, 1989

Mr. Rudy A. Smithwick  
North Carolina Department of Natural  
Resources and Community Development  
P.O. Box 1507  
Washington, North Carolina 27889

SUBJECT: PROPOSED ITINERARY FOR E.P.A. ACTIONS

Dear Mr. Smithwick,

- 1- The following proposal is submitted reference E.P.A. Regional meeting in Washington, N.C. on November 8, 1989. This meeting was held concerning dumping of materials classified as hazardous by E.P.A. regulations.

2- REQUIREMENT

TIMEFRAME

- |   |                                 |
|---|---------------------------------|
| a) Hire Consultant ( <i>ON SITE 11/21/89</i> )              | No Later Than November 17, 1989 |
| b) Examine Soil Analysis at site<br>and receive lab reports | December 7, 1989                |
| c) Development Cleanup Plan                                 | No Later Than December 10, 1989 |
| d) Submit Cleaning Plan E.P.A.                              | No Later Than December 10, 1989 |
| e) Receive Plan Approved E.P.A.                             | No Later Than January 10, 1990  |
| f) Execute Approved Plan                                    | No Later Than January 12, 1990  |
| g) Receive Final E.P.A. Clearance                           | No Later Than February 1, 1990  |

- 3- It is anticipated that the procedure can be accomplished in less time than the above schedule. However, in view of the possibility of bad weather, holidays, laboratory reports, and scheduling of contractors, the above schedule is submitted for approval.

Yours very truly,



Carl R. Grantham, Maintenance Director

Nov. 8, 1989

Attendance for Pitt Co. Schools / Div. Env. Mang.

Richard R. Powers DEM-GW

AR HODGE - DEM - WIC

W. F. Bulow DEM - AG

John K. Bulow Pitt County

Ray Haden Pitt County School

Carl K. Krampton Pitt " "

John H. McKnight Pitt Co. Schools

Rudy A. Smithwick NC DEM



RECEIVED  
WASHINGTON OFFICE

NOV 6 1989

PITT COUNTY SCHOOLS MAINTENANCE  
WINTERVILLE, N.C.

D. E. M.

MEMORANDUM

TO: John McKnight - Deputy Superintendent  
FROM: Carl R. Grantham - Director of Maintenance  
SUBJECT: E.P.A. INVESTIGATION ON DUMPING  
DATE: November 1, 1989

- 1- In order to set the record straight and to advise you of how the event occurred, the following facts are provided:
- a) There were 25 barrels of all kinds of unidentifiable items at the Maintenance Department. They contained approximately 1-40 gallons each.
  - b) These were checked by a laboratory out of Raleigh. The report stated that 14 barrels did not contain any hazardous conditions.
  - c) I inquired about an area to dump these 14 barrels and Ray Hardee stated there was an old sump on his farm that his family has used for years and he wanted it closed.
  - d) I agreed to let him use the backhoe for this purpose and dump the 14 barrels of non-hazardous waste. This was accomplished on October 28, 1989. We did this because we could not afford the time during the week.
  - e) The remaining items of flammable items were and are being used if they were not contaminated with water.
  - f) In some instances contaminated barrels were given to persons who came by and wanted them to use in their personal shop or business for washing parts. They would pour off water and use remainder of product.
  - g) In three or four instances, materials were transferred to other barrels due to the container condition to prevent on-site spillage. It is possible that some of the flammable products were mixed in the non-hazardous barrels, although it was not by design.
  - h) After the 14 barrels were dumped, a total of approximately 30 barrels were taken to the landfill for disposal on October 30, 1989. The landfill requires holes knocked in both ends and will not accept any materials in any barrels hazardous or non-

- i) Buddy Bulow from Washington E.P.A. Office came by today and the following items were discussed and data provided.
- 1) A copy of the lab reports which stated the 14 barrels dumped were not hazardous.
  - 2) I was on the right track, but should have been more diligent in disposal.
  - 3) Worse case is to dig up ground and clean hole out.
  - 4) I was informed that dump would have taken materials had I not taken the word of the dump supervisor but discussed with County Manager's office.
  - 5) He understood the situation and is not on a witch hunt but wants me to get my act straight and learn to ask.
  - 6) Final decision will be a result of his inquiry, chemist input, and supervisor decision.
  - 7) He will discuss with you if you desire. His telephone number in Washington is 946-6481.
- j) I have no excuse to offer and take full responsibility, although when lab report said not hazardous, I saw no reason I could not dump materials. In fact, I did not find a reason in my E.P.A. Regulations. The catch is that in another regulation, wax is covered because it has a minor amount of petroleum products.

Nov. 8, 1989

Attendance for Pitt Co. Schools / Div. Env. Mang.

Richard R. Powers DEM-GW

A. R. HODGE - DEM - WIC

W. F. Bulow DEM - AG

John K. Bulow Pitt County

Ray Hester Pitt County School

Carl K. Brantley Pitt " "

John H. McKnight Pitt Co. Schools

Rudy A. Smithwick NC DEM

RECEIVED  
WASHINGTON OFFICE

DEC 18 1989

D. E. M.

Proposed Work Plan  
Phase I  
Pitt County School  
Maintenance Department Disposal Site

RECEIVED  
WASHINGTON OFFICE

DEC 18 1989

D. E. M.



December 14, 1989

Mr. Rudy Smithwick  
NC Department of Environment,  
Health & Natural Resources  
Division of Environmental Management  
Water Quality Section  
Washington Regional Office  
P.O. Box 1507  
Washington, NC 27889

Re: Proposed Phase I Work Plan  
Pitt County Public School Maintenance Dept.  
Disposal Site  
Ayden, North Carolina  
OMNI Project No. 89-61-151-01

Dear Mr. Smithwick:

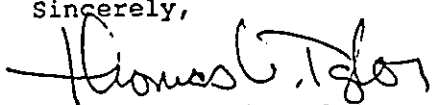
OMNI Environmental Services (OMNI) is pleased to submit the attached Work Plan for a Phase I Remedial Investigation at the above referenced disposal site.

OMNI will initiate field work within five working days of written approval from the Washington Regional DEM.

As a matter of standard policy, OMNI is committed to the utilization of sound health and safety practices as a means of protecting employee health, maintaining compliance with state and federal standards, and reducing liability factors for ourselves and our clients.

Should you have any comments or questions regarding the Work Plan, please do not hesitate to call us at (919) 361-2005. We will be looking forward to your response to initiate the proposed work.

Sincerely,

  
Thomas V. Taylor, P.G.  
Project Geologist

TT/ahs

Enclosure

## Objectives

The objectives for the Phase I Remedial Investigation include a subsurface investigation utilizing hand auger borings to assess the nature and severity of possible soil contamination at the Pitt Co. School, Maintenance Department dump site. Soil samples will be collected for laboratory analysis to determine whether the disposed materials are hazardous wastes under RCRA guidelines or non-hazardous wastes. Should hazardous waste be identified at the site, steps will be taken to excavate and ship the material to an approved TSD facility, utilizing appropriately-trained contractors and transporters. Should non-hazardous wastes be encountered, an appropriate remedial plan will also be developed. The Phase I Investigation will also provide information to determine the need for groundwater assessment at the site.

## Work Tasks

1. Step One: A series of eight to 15 hand auger soil borings will be attempted within and surrounding the disposal pit to scan soil samples for a field determination of total volatile organic compounds (VOC's) using an HNu photo-ionization meter. (The soil samples will also be used to profile sub-surface conditions.) Samples will be scanned, according to state and EPA protocols, at approximately two foot intervals to depths of just above the water table surface, if possible.

NOTE: Step one assumes that the hand augered holes will not collapse during their advancement. Should cave-in be a problem, other means of drilling (and subsequent additional costs) will be necessary.

2. Step Two: Following the HNu scan of each collected sample, the soil samples registering the highest VOC reading from two borings and a third sample based on visual appearance (3 samples total) will be collected and submitted to an analytical laboratory for analysis of SW-846 #8240 (GC/MS purgeables). Portions of the three samples will also be field composited and submitted for analysis of EP-TOX RCRA metals (eight metals), total petroleum hydrocarbons (high fraction), EPA 625 (base/neutral/acid extractables), pH, reactivity and ignitability. EPA approved chain-of-custody procedures will be followed with the shipped samples.

3. Step Three: A report will be issued by OMNI following receipt of the analytical data addressing Phase II tasks. The report will include options for the proper disposal of the material, as well as further investigative procedures (if necessary). The latter may include pit sampling and/or groundwater monitoring, or "no action."

*Consider visit  
at 11/15/89  
12/16*

# Pitt County Schools

1717 WEST FIFTH STREET  
GREENVILLE, NORTH CAROLINA 27834

Edwin L. West, Jr.  
Superintendent  
(919) 752-2934

December 14, 1989

ADMINISTRATIVE OFFICE

DEC 15 1989

Mr. Richard R. Powers  
NC Department of Natural Resources  
and Community Development  
P. O. Box 1507  
Washington, NC 27889

Dear Mr. Powers:

SUBJECT: REVISION TO PROPOSED ITINERARY FOR DIVISION OF ENVIRONMENTAL  
MANAGEMENT (DEM) GROUND WATER SECTION

1. Reference

- A. Pitt County Schools letter dated November 10, 1989, Subject-Proposed Itinerary For E.P.A. Actions
- B. Phone conversation between Carl Grantham, Pitt County Schools Maintenance Director, and Richard Powers on December 14, 1989.

2. Pursuant to the above references and based on recommendations of our consultant, Tom Taylor, Omni Environmental Company, Raleigh, NC, the following changes to reference 1-A are forwarded for information:

<u>Requirement</u>	<u>Time Frame</u>
A. Hire Consultant	Completed
B. Develop and submit to DEM Phase I Proposed Plan	December 14, 1989 (Forwarded by Consultant)
C. Receive Phase I Proposed Plan Approval from DEM	January 29, 1990
D. Execute Phase I Approved Plan and submit Cleanup Plan to DEM	February 22, 1990
E. Receive DEM approval to Proposed Cleanup Plan	March 22, 1990 (Estimate 30 days)
F. Execute Cleanup Plan based on total requirements	*TBD (Estimate 10 days)
G. Receive Final DEM Clearance	*TBD (Estimate 15 days)

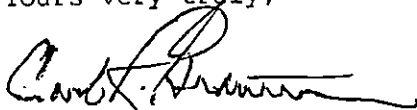
\*To be determined based on factors currently unknown until Phase I Plan is completed.



Mr. Richard R. Powers  
Page two  
December 14, 1989

3. You are advised that should adjustments to dates listed in time frame column be required for reasons beyond the control of Pitt County Schools and/or our consultant, your office will be notified.

Yours very truly,



Carl R. Grantham  
Director of Maintenance

sq

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WASHINGTON OFFICE

DEC 18 1989

OMNI

December 14, 1989

Mr. Rudy Smithwick  
NC Department of Environment,  
Health & Natural Resources  
Division of Environmental Management  
Water Quality Section  
Washington Regional Office  
P.O. Box 1507  
Washington, NC 27889

Re: Proposed Phase I Work Plan  
Pitt County Public School Maintenance Dept.  
Disposal Site  
Ayden, North Carolina  
OMNI Project No. 89-61-151-01

Dear Mr. Smithwick:

OMNI Environmental Services (OMNI) is pleased to submit the attached Work Plan for a Phase I Remedial Investigation at the above referenced disposal site.

OMNI will initiate field work within five working days of written approval from the Washington Regional DEM.

As a matter of standard policy, OMNI is committed to the utilization of sound health and safety practices as a means of protecting employee health, maintaining compliance with state and federal standards, and reducing liability factors for ourselves and our clients.

Should you have any comments or questions regarding the Work Plan, please do not hesitate to call us at (919) 361-2005. We will be looking forward to your response to initiate the proposed work.

Sincerely,

Thomas V. Taylor, P.G.  
Project Geologist

TT/ahs

Enclosure

please followup and see  
that we response

I would suggest that the sampling  
program be expanded to include lab  
analysis for metals and organics  
rather than just field scan for VOC's.

R.S.

RECEIVED  
WASHINGTON OFFICE

DEC 18 1989

D. E. M.

**Proposed Work Plan  
Phase I  
Pitt County School  
Maintenance Department Disposal Site**

## Objectives

The objectives for the Phase I Remedial Investigation include a subsurface investigation utilizing hand auger borings to assess the nature and severity of possible soil contamination at the Pitt Co. School, Maintenance Department dump site. Soil samples will be collected for laboratory analysis to determine whether the disposed materials are hazardous wastes under RCRA guidelines or non-hazardous wastes. Should hazardous waste be identified at the site, steps will be taken to excavate and ship the material to an approved TSD facility, utilizing appropriately-trained contractors and transporters. Should non-hazardous wastes be encountered, an appropriate remedial plan will also be developed. The Phase I Investigation will also provide information to determine the need for groundwater assessment at the site.

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NOTE: Step one assumes that the hand augered holes will not collapse during their advancement. Should cave-in be a problem, other means of drilling (and subsequent additional costs) will be necessary.

2. Step Two: Following the HNu scan of each collected sample, the soil samples registering the highest VOC reading from two borings and a third sample based on visual appearance (3 samples total) will be collected and submitted to an analytical laboratory for analysis of SW-846 #8240 (GC/MS purgeables). Portions of the three samples will also be field composited and submitted for analysis of EP-TOX RCRA metals (eight metals), total petroleum hydrocarbons (high fraction), EPA 625 (base/neutral/acid extractables), pH, reactivity and ignitability. EPA approved chain-of-custody procedures will be followed with the shipped samples.

3. Step Three: A report will be issued by OMNI following receipt of the analytical data addressing Phase II tasks. The report will include options for the proper disposal of the material, as well as further investigative procedures (if necessary). The latter may include pit sampling and/or groundwater monitoring, or "no action."

FEB 2 1990

Consulting  
Engineering  
Testing

D. E. M.



February 1, 1990

Mr. Willie A. Hardison, Hydrogeologist  
NCDEHNR  
Division of Environmental Management  
Water Quality Section  
Washington Regional Office  
P.O. Box 1507  
Washington, NC 27889

Re: Tentative Schedule of Events  
Pitt County Public School  
Maintenance Dept. Disposal Site  
Ayden, North Carolina  
OMNI Project No. 89-61-151.01

Dear Mr. Hardison:

Per our telephone conversation on January 30, 1990, I foresee OMNI performing the Phase I field tasks, as addressed in our Phase I Work Plan, dated December 14, 1989, and in the DEM Addendum, dated January 16, 1990, on or about February 14, 1990. Assuming a three week turnaround time from our analytical laboratory and approximately one week to put together a Phase II (Corrective Action) Work Plan, you can expect the Work Plan on or about March 16, 1990.

If you should have any problems with this schedule, or require any additional information, please contact me at (919) 361-2005.

Sincerely,

OMNI Environmental Services, Inc.

A handwritten signature in dark ink, appearing to read "Thomas V. Taylor".

Thomas V. Taylor, P.G.  
Project Geologist

TT/ahs

cc: Mr. Carl Grantham

COUNTY Pitt  
QUAD NO. N24P SERIAL NO. —  
LAT. — LONG. —

Report to: ARO, FRO, MRO, RRO, WaRO, ViRO,  
WSRO, Kinston FO Other —  
Shipped by: Bus Courier Other —

COLLECTOR(S): Tankard Pearce DATE 5/16/90 TIME 1330 P.M. PURPOSE: BASELINE, COMPLAINT, COMPLIANCE, LUST, OTHER —  
(circle one)

### FIELD ANALYSES

pH 9.0 Spec. Cond. 94 at 25°C  
Temp. — °C Odor Petroleum  
Appearance Turbid Taste —  
Field Analysis By: Tankard/Pearce

N.C. DEPT. OF NATURAL RESOURCES  
**CHAIN OF CUSTODY**  
POLLUTION CONTROL  
JUL 10 1990  
6301

### GROUNDWATER FIELD/LAB FORM

SAMPLE PRIORITY  
☒ ROUTINE ☐ EMERGENCY

Owner Pitt County #55310  
Location or site Pitt County School Maintenance Yard  
Description of sampling point Bore hole #1 3' from Maintenance Shop  
Sampling Method Grab (pump, bailer, etc.) Sample Interval 4 1/2 ft. (54 in.)  
(42 to 54)  
Remarks SUSPECT WASTE OIL (pumping time, air temp, etc.)

### LABORATORY ANALYSES

BOD <sub>5</sub> 310	mg/l
COD High 340	mg/l
COD Low 335	mg/l
Coliform:MF Fecal 31616	/100ml
Coliform:MF Total 31504	/100ml
TOC 680	mg/l
Turbidity 76	NTU
pH 403	units
Alkalinity to pH 4.5 410	mg/l
Alkalinity to pH 8.3 415	mg/l
Carbonate 445	mg/l
Bicarbonate 440	mg/l
Arsenic:Total 1002	ug/l
Carbon dioxide 405	mg/l
Chloride 940	mg/l
Chromium:Hex 1032	ug/l
Color:True 80	Pl-Co
Cyanide 720	mg/l

Diss. Solids 70300	mg/l
Fluoride 951	mg/l
Hardness:Total 900	mg/l
Hardness (non-carb) 902	mg/l
Phenols 32730	ug/l
Specific Cond. 95	uMhos/cm <sup>2</sup>
Sulfate 945	mg/l
Sulfide 745	mg/l
NH <sub>3</sub> as N 610	mg/l
TKN as N 625	mg/l
NO <sub>2</sub> + NO <sub>3</sub> as N 630	mg/l
P:Total as P 665	mg/l

Ag - Silver 1077	ug/l
Al - Aluminum 1108	mg/l
Ba - Barium 1007	mg/l
Ca - Calcium 916	mg/l
Cd - Cadmium 1027	ug/l
Chromium:Total 1034	ug/l
Cu - Copper 1042	ug/l
Fe - Iron 1042	mg/l
Hg - Mercury 719	ug/l
K - Potassium 937	mg/l
Mg - Magnesium 927	mg/l
Mn - Manganese 1055	ug/l
Na - Sodium 929	mg/l
Ni - Nickel 1067	ug/l
Pb - Lead 1051	ug/l
Se - Selenium 1147	ug/l
Zn - Zinc 1092	ug/l

Organochlorine Pesticides
Organophosphorus Pesticides
Acid Herbicides
Base / Neutral Extractable Organics
Acid Extractable Organics
✓ Purgeable Organics (VOA bottle)
1,2 - Dibromoethane (EDB)
SEE ATTACHED ORGANICS ANALYSIS REPORT

Lab Comments: —

# VOLATILE ANALYTICAL REPORT

LAB NO. OG439

REPORTED BY PH

ENTERED BY DA

CHECKED BY ALC

CHECKED BY DS

REVIEWED BY ALC

SUPERVISOR BEK

DATE 7/2/90

SAMPLE TYPE: WATER

## ANALYSIS RESULTS

<u>STORET NO.</u>	<u>COMPOUND</u>	<u>CONCENTRATION</u>
-------------------	-----------------	----------------------

\*

FOUR UNIDENTIFIED PEAKS DETECTED BY GC/ELCD.

39180	TRICHLOROETHENE	3.6 UG/L
34010	TOLUENE	6 UG/L
34475	TETRACHLOROETHENE	1.3 UG/L
34371	ETHYL BENZENE	0.68 UG/L
81551	M,P-XYLENES	5.7 UG/L
81551	O-XYLENE	1.7 UG/L
QUANTITATED BY GC/PID.		

\* SAMPLE ANALYZED BEYOND HOLDING TIME.





RECEIVED  
MAY 7 1990

State of North Carolina  
Department of Environment, Health and Natural Resources  
Northeastern Region  
1424 Carolina Avenue, Washington, North Carolina 27889

GROUNDWATER SECTION  
RALEIGH, NC

James G. Martin, Governor  
William W. Cobey, Jr., Secretary

Lorraine G. Shinn  
Regional Manager

DIVISION OF ENVIRONMENTAL MANAGEMENT

April 30, 1990

Mr. Carl R. Grantham  
Maintenance Director  
Pitt County Schools  
1717 West Fifth Street  
Greenville, North Carolina 27834

Re: Pitt County School Site  
NCSR 1110, near Ayden, North Carolina  
Pitt County

Dear Mr. Grantham:

Our office is in receipt of your April 24, 1990 response to the Notice of Violation (N.O.V.) the Division of Environmental Management issued to the Pitt County School Maintenance Department. According to the certified mailing receipt, the maintenance department received the Notice on April 11, 1990.

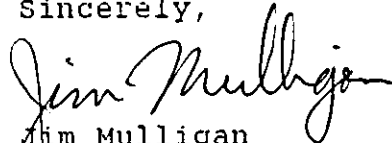
In the Notice, it was stipulated that you should inform the Division of your intention to comply. Hence, your letter of April 24, 1990, is considered a satisfactory response. Let me say that this office appreciates your cooperation, and it is our intention to work cooperatively with you as our limits allow.

Mr. Carl R. Grantham  
Page 2  
April 30, 1990

In regards to which agency having jurisdiction, it is our conclusion, based on discussions between the Hazardous Waste Management Section and our office that the Hazardous Waste Section, by definition, would have control of this incident. Therefore, our office has no objections to the Hazardous Waste Section having primacy in the matter. Please understand that this decision is not intended to relieve Pitt County Schools of any obligation specified in the NOV issued by the Division of Environmental Management. Any agreement entered into with the Hazardous Waste Section or any other agency must still address those issues covered in the Notice.

Should you have any questions or require further clarification on our position, please feel free to call Willie Hardison, Acting Groundwater Supervisor, or me at (919) 946-6481.

Sincerely,

  
Jim Mulligan  
Regional Supervisor

cc: Perry Nelson, Groundwater Chief ✓  
Larry Perry, Hazardous Waste Section  
Jerry Parks, Hazardous Waste Section  
Lorraine Shinn, Regional Office Manager  
WaRO

DIVISION OF ENVIRONMENTAL MANAGEMENT

April 18, 1990

MEMORANDUM

TO: Perry Nelson, Chief  
Groundwater Section

FROM: *PT* Patrick Towell  
Hydrogeological Technician

SUBJECT: Pitt County Schools  
Maintenance Dumpsite  
Ayden, North Carolina  
Pitt County

Please find enclosed the information you requested concerning the above referenced site.

If I can be of further assistance, please call.

Enclosure

PT:ekw

**RECEIVED**  
APR 20 1990

GROUNDWATER SECTION  
RALEIGH, NC

DIVISION OF ENVIRONMENTAL MANAGEMENT

November 1, 1989

TO: Jim Mulligan, Regional Supervisor  
Washington Regional Office

THROUGH: Victor Copelan, Air Quality Regional Supervisor  
Washington Regional Office

FROM: W.F. Bulow, Air Quality Permits Coordinator  
*WFB* Washington Regional Office

SUBJECT: Dumping of waste by Pitt Co. Schools

On 10-11-89 I received a call from an individual asking what the regulations were concerning dumping of waste.

I asked what he meant and he stated that an employee of the Pitt Co. school was burying something on his private property that belonged to the Pitt Co. schools.

I then placed a call to John Bulow, my brother who is the assistant county manager of Pitt Co. to see if he was aware of any disposal by the county on the employee's property.

He called me by shortly to say that the man who properly the waste was buried on was a Pitt Co. school employee and that Pitt County had nothing to do with the issue.

He informed me that I needed to call Carl Grantham, superintendent of maintenance for the schools 756-3313.

I called Mr. Grantham on 10-31-89 and asked him if he was aware of any disposal of material by an employee on the employee's property and he said he knew what I was referring to.

Mr. Grantham said that he had samples taken of 25 drums of various materials that had accumulated over the last several years for which there was no labels by Omni Environmental Inc. of Raleigh, N.C. He stated that the results stated that some of the material was non-hazardous and some of the material had hazardous characteristics such as flammability and aromatic hydrocarbons. The material that came back as hazardous characteristic was given to a reclaimer through the Pitt County bus garage.

The material that was not label as hazardous was taken to the property of Ray Hardee of Ayden, N.C. and poured in an abandoned sand pit and covered over on 10-28-89 by Mr. Hardee and two other school employees at the direction of Mr. Grantham.

The basic nature of the material disposed was several drum of floor wax that had frozen over the years, one drum of solidified paint and approximately 10 drum of various detergents and cleaners that had gotten water in them.

The Ph of one drum was 13 and two of them was 12.

A copy of the report sent to Mr. Grantham from Omni is attached.

Mr. Grantham stated that he was not aware that what he did was incorrect but that he was responsible for the action and was ready to do what was necessary to correct his mistake.

I have discussed this with Roger Thorpe and Rudy Smithwick of this office and they would like to discuss this with you and then meet with the people from Pitt County Schools.

CC:

Roger Thorpe  
Vic Copelan  
Rudy Smithwick  
Terry Dover  
Jerry Parks  
Lorraine Shinn

DRUM IDENTIFICATION: Pitt County Schools

Sample Date: October 28, 1988

Location: Winterville, NC

Contact: Carl Grantham

\*\*\*\*\*  
DRUM #1

USE LIQUID SOLID OTHER

HAZARDOUS CHARACTERISTICS: flammable

COLOR: brown

DOT CONTAINER: no

POSITIVE TESTS: flammable

NEGATIVE TESTS: oxidizer  
water soluble  
chlorine

\*\*\*\*\*  
DRUM #2

USE LIQUID SOLID OTHER

HAZARDOUS CHARACTERISTICS: flammable

COLOR: brown

DOT CONTAINER: no

POSITIVE TESTS: flammable

aromatic-  
hydrocarbon

NEGATIVE TESTS: oxidizer  
water soluble  
chlorine

\*\*\*\*\*  
DRUM #3

USE LIQUID SOLID OTHER

HAZARDOUS CHARACTERISTICS: flammable

COLOR: yellow

DOT CONTAINER: no

POSITIVE TESTS: flammable

aromatic-  
hydrocarbons

NEGATIVE TESTS: oxidizer  
water soluble  
chlorine

\*\*\*\*\*

DRUM #4

LIQUID SOLID OTHER

HAZARDOUS CHARACTERISTICS: flammable

COLOR: black

DOT CONTAINER: no

POSITIVE TESTS: flammable

NEGATIVE TESTS: oxidizer  
water soluble  
chlorine

\*\*\*\*\*

DRUM #5

LIQUID SOLID OTHER

HAZARDOUS CHARACTERISTICS: none

COLOR: grey

DOT CONTAINER: no

POSITIVE TESTS: water soluble  
pH 7

NEGATIVE TESTS: oxidizer  
flammable

COMMENTS: suds

\*\*\*\*\*

DRUM #6

LIQUID SOLID OTHER

HAZARDOUS CHARACTERISTICS: none

COLOR: white

DOT CONTAINER: no

POSITIVE TESTS: water soluble  
pH 7

NEGATIVE TESTS: oxidizer  
flammable

\*\*\*\*\*

DRUM #2

LIQUID SOLID OTHER

HAZARDOUS CHARACTERISTICS: flammable

COLOR: yellow

DOT CONTAINER: no

POSITIVE TESTS: flammable

NEGATIVE TESTS: oxidizer  
water soluble  
chlorine

*Dump*  
COMMENTS: used wax

\*\*\*\*\*

DRUM #3

LIQUID SOLID OTHER

HAZARDOUS CHARACTERISTICS: none

COLOR: brown

DOT CONTAINER: no

*Dump*  
POSITIVE TESTS: water soluble  
pH 9

NEGATIVE TESTS: oxidizer  
flammable

COMMENTS: suds

\*\*\*\*\*

DRUM #9

LIQUID SOLID OTHER

HAZARDOUS CHARACTERISTICS: flammable

COLOR: white

DOT CONTAINER: no

*8/17/94  
ATW  
840P*  
POSITIVE TESTS: flammable  
solvent

NEGATIVE TESTS: oxidizer  
water soluble  
chlorine



\*\*\*\*\*  
DRUM #10

LIQUID SOLID OTHER

HAZARDOUS CHARACTERISTICS: flammable

COLOR: brown

DOT CONTAINER: no

POSITIVE TESTS: flammable  
aromatic-  
hydrocarbon

NEGATIVE TESTS: oxidizer  
water soluble  
chlorine

\*\*\*\*\*  
DRUM #11

LIQUID SOLID OTHER

HAZARDOUS CHARACTERISTICS: flammable

COLOR: black

DOT CONTAINER: no

POSITIVE TESTS: flammable

NEGATIVE TESTS: oxidizer  
water soluble  
chlorine

\*\*\*\*\*  
DRUM #12

LIQUID SOLID OTHER

HAZARDOUS CHARACTERISTICS: flammable

COLOR: clear

DOT CONTAINER: no

POSITIVE TESTS: flammable  
solvent

NEGATIVE TESTS: oxidizer  
water soluble  
chlorine

\*\*\*\*\*

DRUM #13

LIQUID SOLID OTHER

HAZARDOUS CHARACTERISTICS: none

COLOR: milky

DOT CONTAINER: yes

POSITIVE TESTS: water soluble  
pH 5.5

NEGATIVE TESTS: oxidizer  
flammable

COMMENTS: suds

\*\*\*\*\*

DRUM #14

LIQUID SOLID OTHER

HAZARDOUS CHARACTERISTICS: none

COLOR: brown

DOT CONTAINER: no

POSITIVE TESTS: water soluble  
pH 12

NEGATIVE TESTS: oxidizer  
flammable

COMMENTS: dilute caustic

\*\*\*\*\*

DRUM #15

LIQUID SOLID OTHER

HAZARDOUS CHARACTERISTICS: flammable

COLOR: clear

DOT CONTAINER: no

POSITIVE TESTS: flammable  
solvent

NEGATIVE TESTS: oxidizer  
water soluble  
chlorine

\*\*\*\*\*

DRUM #13

LIQUID SOLID OTHER

HAZARDOUS CHARACTERISTICS: none

COLOR: red

DOT CONTAINER: no

POSITIVE TESTS: none

NEGATIVE TESTS: oxidizer  
water soluble  
flammable

COMMENTS: paint

\*\*\*\*\*

DRUM #14

LIQUID SOLID OTHER

HAZARDOUS CHARACTERISTICS: none

COLOR: brown

DOT CONTAINER: no

POSITIVE TESTS: water soluble  
pH 12

NEGATIVE TESTS: oxidizer  
flammable

COMMENTS: dilute caustic

\*\*\*\*\*

DRUM #15

LIQUID SOLID OTHER

HAZARDOUS CHARACTERISTICS: none

COLOR: clear/brown

DOT CONTAINER: no

POSITIVE TESTS: water soluble  
pH 7.5

NEGATIVE TESTS: oxidizer  
flammable

\*\*\*\*\*  
DRUM #19

LIQUID SOLID OTHER

HAZARDOUS CHARACTERISTICS: flammable

COLOR: clear

DOT CONTAINER: no

435  
POSITIVE TESTS: flammable  
solvent

NEGATIVE TESTS: oxidizer  
water soluble  
chlorine

\*\*\*\*\*  
DRUM #20

LIQUID SOLID OTHER

HAZARDOUS CHARACTERISTICS: corrosive

COLOR: pink

DOT CONTAINER: no

1.1  
POSITIVE TESTS: oxidizer  
water soluble  
pH 13

NEGATIVE TESTS: peroxide

\*\*\*\*\*  
DRUM #21

LIQUID SOLID OTHER

HAZARDOUS CHARACTERISTICS: flammable

COLOR: clear

DOT CONTAINER: yes

POSITIVE TESTS: flammable  
solvent

NEGATIVE TESTS: oxidizer  
water soluble  
chlorine

\*\*\*\*\*

**DRUM #24**

LIQUID SOLID OTHER

HAZARDOUS CHARACTERISTICS: flammable

COLOR: pink

DOT CONTAINER: yes

POSITIVE TESTS: flammable  
solvent

NEGATIVE TESTS: oxidizer  
water soluble  
chlorine

COMMENTS: may have small amount of chlorine  
suds

\*\*\*\*\*

**DRUM #25**

LIQUID SOLID OTHER

HAZARDOUS CHARACTERISTICS: none

COLOR: beige

DOT CONTAINER: no

POSITIVE TESTS: water soluble  
pH 8.5

NEGATIVE TESTS: oxidizer  
flammable

\*\*\*\*\*

**DRUM #26**

LIQUID SOLID OTHER

HAZARDOUS CHARACTERISTICS: none

COLOR: white

DOT CONTAINER: no

POSITIVE TESTS: water soluble  
pH 9

NEGATIVE TESTS: oxidizer  
flammable

COMMENTS: suds

\*\*\*\*\*

DRUM #25

LIQUID SOLID OTHER

HAZARDOUS CHARACTERISTICS: none

COLOR: brown

DOT CONTAINER: no

POSITIVE TESTS: water soluble  
pH 11

NEGATIVE TESTS: oxidizer  
flammable

COMMENTS: ammonia smell  
suds

*Rhony*

7-90035

Consulting  
Engineering  
Testing

March 20, 1990

RECEIVED  
WASHINGTON OFFICE

MAR 21 1990



D. E. M.

Mr. Willie A. Hardison  
NCDEHNR  
Division of Environmental Management  
Water Quality Section  
Washington Regional Office  
P.O. Box 1507  
Washington, NC 27889

Re: Phase I Remedial Investigation  
Pitt County Schools Maintenance Dept. Disposal Site  
Ayden, North Carolina  
OMNI Project No. 61-151.01

Dear Mr. Hardison:

On behalf of Pitt County Schools Maintenance Department, OMNI is pleased to present the attached Phase I Remedial Investigation letter report to the Washington Regional Office of DEM for your information and response.

Please do not hesitate to call us at 919-361-2005 should you have any questions or comments.

Sincerely,

Thomas V. Taylor, P.G.  
Project Geologist

Thomas E. Mappes, P.E.  
Director Environmental Management

TT/ahs

Enclosure

cc: Carl Grantham

7-90035

**Phase I Remedial Investigation**

**Ayden, NC Disposal Site**

RECEIVED  
WASHINGTON OFFICE

MAR 21 1990

D. E. M.

Prepared For:

Maintenance Department  
Pitt County Schools  
Winterville, NC

Prepared By:

OMNI Environmental Services, Inc.  
P.O. Box 14001  
Research Triangle Park, NC 27709

March 1990



March 19, 1990



Mr. Carl Grantham  
Pitt County Schools Maintenance Dept.  
P.O. Box 1296  
Winterville, NC 28590

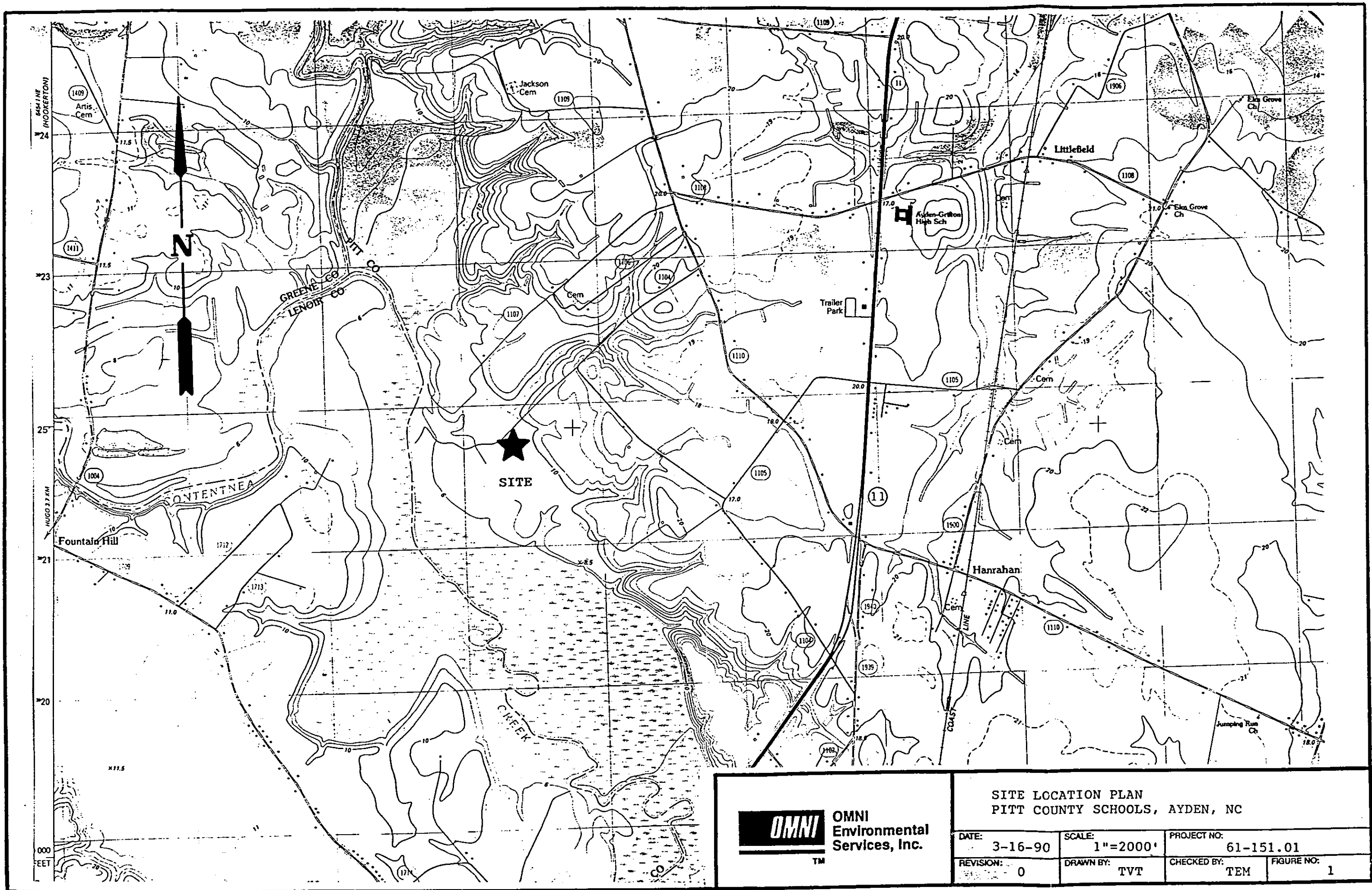
RE: Phase I Remedial Investigation  
Pitt County Schools Maintenance Dept. Disposal Site  
Ayden, North Carolina  
OMNI Project No. 61-151.01

Dear Mr. Grantham:

OMNI Environmental Services (OMNI) has completed the Phase I Remedial Investigation at the above referenced disposal site near Ayden, North Carolina as shown on Figure 1. This letter report describes the activities conducted at the site and our findings. A copy of this report should be sent to the Washington Region, Division of Environmental Management (DEM) for their records and response.

#### PHASE I OBJECTIVES AND SCOPE

The objectives as outlined in the "Proposed Work Plan - Phase I" section of our proposal dated December 18, 1989, included a subsurface investigation utilizing hand auger borings to assess the nature and severity of possible soil contamination at the dump site. In addition, possible ground water contamination would also be investigated in accordance with a letter submitted by the DEM, dated January 16, 1990. Soil and ground water samples would be collected for laboratory analysis to determine whether the disposed materials might be classified as hazardous according to RCRA guidelines. Should impacts to ground water be evident, a Phase II ground water assessment may be necessary before remediation efforts are initiated.



**OMNI**  
Environmental  
Services, Inc.

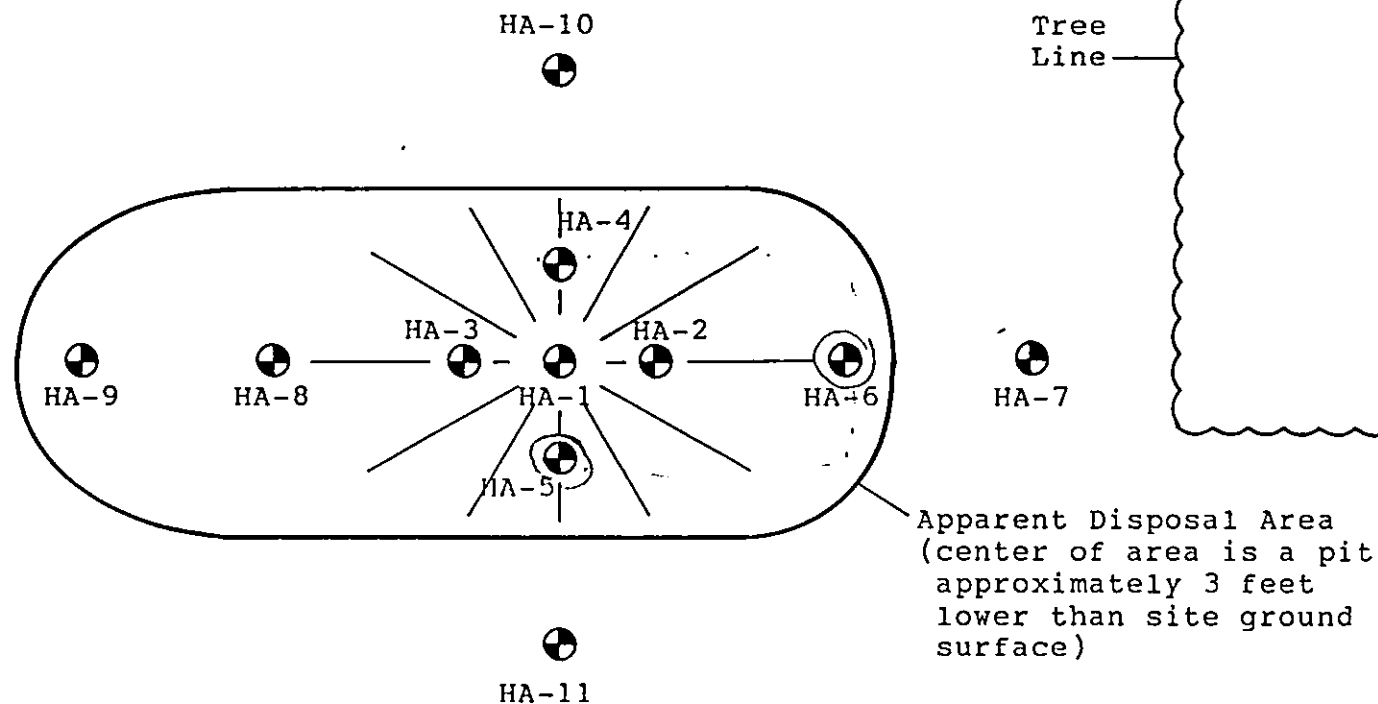
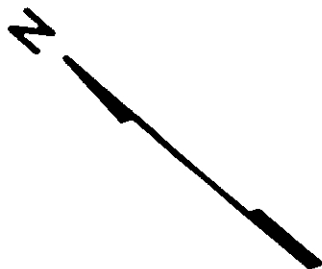
**SITE LOCATION PLAN  
PITT COUNTY SCHOOLS, AYDEN, NC**

DATE:	3-16-90	SCALE:	1"=2000'	PROJECT NO:	61-151.01
REVISION:	0	DRAWN BY:	TVT	CHECKED BY:	TEM
				FIGURE NO:	1

## FIELD METHODS

Soil Sampling. On February 14 and 15, 1990 OMNI personnel were on site to perform the Phase I Remedial Investigation. A series of eleven hand auger borings (HA-1 through HA-11) were advanced to or just above the water table surface. The borings are located as shown on Figure 2. The water table was encountered at depths ranging from approximately two to five feet below the ground surface. (Note: the two foot depth --to-water was encountered at the bottom of the approximately 3 feet deep pit.) Each boring was advanced with a field-decontaminated stainless steel hand auger. Soil samples were collected at approximately two-foot intervals and placed in sealable plastic bags labeled with the boring number and the depth each sample was obtained. Following the completion of each boring, the soil samples were classified and logged in the field by a qualified geologist according to the Unified Soil Classification System (ASTM D-2488). Measurements of total volatile organic compounds (VOC's) were then obtained from the headspace of each sample bag utilizing an HNu photoionization detector (PID). The instrument probe was inserted into the plastic bag and the measurements were read directly from the read-out display in parts per million (ppm) of total VOC's. All samples were then placed in a cooler with ice until all sampling was completed. The soil profile of each boring and the HNu measurements from each sample are contained in Table 1.

At the completion of soil sampling, three samples were chosen for laboratory analysis: HA-4 from 2 feet, Sample No. 1183 (based on high HNu readings); HA-5 from 4 feet, Sample No. 1184 (based on obviously contaminated appearance); and HA-8 from 2 feet, Sample No. 1185 (located approximately 30-feet from apparent highest concentrations of contamination). These samples were transferred to appropriately prepared laboratory sample containers with labels indicating the sample number, date, time, analysis to be conducted and sampler's initials. In addition, a single composite sample composed of the above three samples was also submitted for additional analysis (Sample No. 1186). All



**LEGEND:**

Hand Auger Boring

Tree Line



OMNI  
Environmental  
Services, Inc.

SAMPLE LOCATION MAP  
PITT COUNTY SCHOOLS, AYDEN, NC

DATE: 3-19-90	SCALE: 1"=20'	PROJECT NO: 61-151.01
REVISION: 0	DRAWN BY: TVT	CHECKED BY: TEM
		FIGURE NO: 2

TABLE 1

## Hand Auger Boring Soil Descriptions and HNu Measurements

Hand Auger Boring	Depth (Ft.)	Soil Description	HNu Measurement (ppm)
HA-1	2.0	Tan fine SAND (SW), (wet) - oily residue @ 2.0'	200
HA-2	2.0	Tan fine SAND (SW), (wet) - liquid @ 2.0'	250
HA-3	2.0	Tan-gray fine SAND (SW), (very moist) - refusal @ 1.5', move boring 1.0' north, liquid @ 2.0'	310
HA-4	2.0 <sup>(1)</sup>	Tan-brown fine SAND (SW), (moist) - refusal @ 2.0'	480
HA-5 <sup>(2)</sup>	2.0	Tan-brown fine SAND (SW), (moist) - refusal @ 3.0', move boring 1.0' east	360
	4.0 <sup>(1)</sup>	Tan-brown fine SAND (SW), (very moist) - oily residue	280
HA-6 <sup>(2)</sup>	2.0	Brown fine SAND (SW), (moist)	24
	4.0	Brown-gray fine SAND (SW), (very moist) - water @ 4.0'	260
HA-7	2.0	Tan fine SAND (SW)	1.8
	4.0	Tan fine SAND (SW), (moist) - water @ 5.0'	1.2
HA-8	2.0 <sup>(1)</sup>	Brown fine SAND (SW)	60
	3.0	Light tan fine to medium SAND (SP), (very moist).	30
HA-9	2.0	Tan fine SAND (SW)	0
	4.0	Tan fine to medium SAND (SP), (moist)	0

TABLE 1 (CONTINUED)

<u>Hand Auger Boring</u>	<u>Depth (Ft.)</u>	<u>Soil Description</u>	HNu
			<u>Measurement (ppm)</u>
HA-10	2.0	Tan fine SAND (SW)	0
	4.0	Tan fine SAND (SW), (moist)	0
HA-11	2.0	Tan fine SAND (SW)	0
	5.0	Light tan fine to medium SAND (SP), (very moist)	0.3

(1) Soil samples submitted for laboratory analysis.

(2) Ground water samples submitted for laboratory analysis.

Mr. Carl Grantham  
March 19, 1990  
Page Seven

four soil samples were placed in a cooler with ice, chilled to approximately 4°C and transported to an analytical laboratory using EPA approved chain-of-custody procedures to ensure sample integrity.

The individual grab Sample Nos. 1183, 1184 and 1185 were submitted for analysis of purgeables (volatiles) by SW Method 846 #8240. The composite sample (No. 1186) was submitted for analysis of base/neutral/acid extractables by EPA Method 625, total petroleum hydrocarbons by GC, EP-TOX RCRA metals, pH, reactivity and ignitability.

Ground Water Sampling. As per the DEM recommendation (January 16, 1990 letter), OMNI attempted to collect ground water samples from three locations. OMNI was able to collect ground water from only two of the pre-existing hand auger borings. Numerous attempts were made to deepen several of the borings to access ground water, but immediate caving of the "running" sands prevented this. Of the two borings that water was obtained, only a very limited amount of water could be collected, and the samples contained an excessive amount of solids. The two ground water samples were collected with decontaminated teflon bailers attached to new nylon cord. The bailers were lowered into the uncased borehole as soon as possible after advancing the borehole below the water table to collect the "raw" water samples. The water samples were collected from borings HA-5 and HA-6; Sample Nos. 1187 and 1188, respectively. Boring HA-5 contained phase-separated liquids.

The water samples were prepared and shipped according to the same procedures as outlined in the previous section. The two grab water samples were submitted for analysis of purgeables (volatiles) by SW Method 846 #8240. After all sampling was completed, those borings that penetrated the ground water surface were abandoned with a cement grout. The remaining borings were backfilled with soil cuttings.

11-74-2 246 - 8240

### ANALYTICAL RESULTS

The analytical results of the soil sample collected from boring HA-4 at 2 feet (No. 1183) indicated 87,000 ug/kg (parts per billion) of ethylbenzene, 480,000 ug/kg of tetrachloroethene and 780,000 ug/kg of total xylenes. The soil sample collected from boring HA-5 at 4 feet (No. 1184) revealed concentrations of 450,000 ug/kg of ethylbenzene, 120,000 ug/kg of methylene chloride, 1,700,000 ug/kg of tetrachloroethane, 56,000 ug/kg of 1,1,1-trichloroethene and 2,800,000 ug/kg of total xylenes.

The composite soil sample (Sample No. 1186) revealed the following information: the soil is ignitable at 118°F, pH is 5.0, total petroleum hydrocarbons by GC is 1700 mg/kg (parts per million); it was noted that "the sample contains a petroleum hydrocarbon blend with a distillation range similar to gasoline." The eight EP-TOX RCRA metals were below their respective detection limits. The composite was not reactive. Compounds that were detected from the base/neutral/acid extractables analysis included bis(2-ethylhexyl) phthalate at 33,000 ug/kg, which may be attributable to the sampling gloves, and naphthalene at 16,000 ug/kg.

The analytical results of the ground water sample from boring HA-5 (Sample No. 1187) indicated 290,000 ug/L (parts per billion) of ethylbenzene, 950,000 ug/L of methylene chloride, 1,100,000 ug/L of tetrachloroethene, 100,000 ug/L of 1,1,1 - trichloroethane, and 1,800,000 ug/L of total xylenes. The second ground water sample collected from boring HA-6 (No. 1188) contained 3,700 ug/L of ethylbenzene, 72,000 ug/L of methylene chloride, 13,000 ug/L of tetrachloroethene, and 24,000 ug/L of total xylenes.

All analytical results are contained in the laboratory report in the Appendix.



Mr. Carl Grantham  
March 19, 1990  
Page Nine

### SUMMARY OF FINDINGS

Several compounds on the U.S. EPA list of hazardous substances (40 CFR 302.4) were identified in the samples collected from the Ayden site. Additionally, some of the soils exhibited the characteristic of ignitability (i.e., flash point less than 140°F). These results indicate that any remediation steps taken at the site, such as any waste removal, must be in conformance with the Federal Resource Conservation and Recovery Act rules (RCRA), the Comprehensive Environmental Response, Compensation, and Liability Act rules (CERCLA), and/or conforming State of North Carolina rules, as applicable.

Near-surface soils at the site are sands and ground water is relatively shallow. No confining layers were apparent to the shallow depths penetrated. These conditions warrant further assessment of potential impact on site ground waters. These conditions, in conjunction with the volatile nature of the principal contaminants, will facilitate soil gas survey methodologies as a low-cost screening method to determine extent of contaminant migration (if any) away from the disposal area.

The site is located in a sparsely-populated rural area. There appear to be no potential users of the ground waters within 2,000 feet of the site and the nearest permanent surface water is also at least 2,000 feet distant.

### PHASE II RECOMMENDATIONS

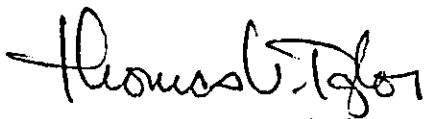
This section of the letter report was to include a Phase II Corrective Action Work Plan. This report format was planned, based on the assumption that no hazardous constituents would be found at the disposal site. In view of the hazardous constituents present, the following alternate Phase II Remedial Investigative Tasks are recommended:

Mr. Carl Grantham  
March 19, 1990  
Page Ten

- Perform a soil gas survey to better define the extent of groundwater contamination.
- Install and sample three or four ground water monitor wells, the locations of which will be based on the results obtained from the soil gas survey.
- Prepare the Corrective Action Work Plan for remediation of the site. Where appropriate, wastes to be removed or treated under the Corrective Action Work Plan will be handled in accordance with federal and state of North Carolina hazardous waste regulations.

We hope that this letter report provides the details the NC DEM needs to evaluate the Ayden site. Please do not hesitate to call if you should have any questions regarding this letter report.

Sincerely,



Thomas V. Taylor, P.G.  
Project Geologist

Thomas E. Mappes, P.E.  
Director of Environmental Management

**APPENDIX**

**Analytical Laboratory Report**

**Chain-of-Custody**



P.O. Box 12846  
Research Triangle Park, North Carolina 27709  
(919) 677-0090  
FAX (919) 677-0427

Rec'd 3-13-90

March 9, 1990

Tom Taylor  
Omni Environmental  
P.O. Box 14001  
RTP, NC 27709

Reference IEA Report No.: 553009 & 553009(0)  
Project ID: 60-151.05

Dear Mr. Taylor,

Transmitted herewith are the results of analyses on six samples submitted to our laboratory on February 15, 1990.

Please see the enclosed reports for your results.

Very truly yours,

INDUSTRIAL & ENVIRONMENTAL ANALYSTS, INC.

Linda F. Mitchell  
Director, Technical Support Services

State Certification:

Alabama - #40210  
Georgia - #816  
Kansas - #E-158

New Jersey - #67719  
Tennessee - #00296  
Virginia - #00179

South Carolina - #99021  
North Carolina - #37720  
#84

IEA Sample Number: 553-009-1  
Sample Identification: 1183  
Date Analyzed: 02/25/90

By: Porter

Number	Compound	Quantitation Limit (ug/kg)	Results Concentration (ug/kg)
1	Acetone	250,000	BQL
2	Benzene	12,500	BQL
3	Bromodichloromethane	12,500	BQL
4	Bromoform	12,500	BQL
5	Bromomethane	25,000	BQL
6	2-Butanone	250,000	BQL
7	Carbon disulfide	12,500	BQL
8	Carbon tetrachloride	12,500	BQL
9	Chlorobenzene	12,500	BQL
10	Dibromochloromethane	12,500	BQL
11	Chloroethane	25,000	BQL
12	2-Chloroethylvinyl ether	25,000	BQL
13	Chloroform	12,500	BQL
14	Chloromethane	25,000	BQL
15	1,1-Dichloroethane	12,500	BQL
16	1,2-Dichloroethane	12,500	BQL
17	1,1-Dichloroethene	12,500	BQL
18	1,2-Dichloroethene (total)	12,500	BQL
19	1,2-Dichloropropane	12,500	BQL
20	cis-1,3-Dichloropropene	12,500	BQL
21	trans-1,3-Dichloropropene	12,500	BQL
22	Ethylbenzene	12,500	87,000
23	2-Hexanone	125,000	BQL
24	Methylene chloride	12,500	BQL
25	4-Methyl-2-pentanone	125,000	BQL
26	Styrene	12,500	BQL
27	1,1,2,2-Tetrachloroethane	12,500	BQL
28	Tetrachloroethene	12,500	480,000
29	Toluene	12,500	BQL
30	1,1,1-Trichloroethane	12,500	BQL
31	1,1,2-Trichloroethane	12,500	BQL
32	Trichloroethene	12,500	BQL
33	Vinyl acetate	125,000	BQL
34	Vinyl chloride	25,000	BQL
35	Xylenes (total)	12,500	780,000

Comments:

BQL = Below Quantitation Limit  
Quantitation limit elevated due to sample dilution prior to analysis.  
Sample diluted due to high concentration of target compounds present.



GC/MS PURGEABLES  
SW-846 METHOD 8240

IEA Sample Number: 553-009-2  
Sample Identification: 1184  
Date Analyzed: 02/28/90

By: Harris

Number	Compound	Quantitation Limit (ug/kg)	Results Concentration (ug/kg)
1	Acetone	1,000,000	BQL
2	Benzene	50,000	BQL
3	Bromodichloromethane	50,000	BQL
4	Bromoform	50,000	BQL
5	Bromomethane	100,000	BQL
6	2-Butanone	1,000,000	BQL
7	Carbon disulfide	50,000	BQL
8	Carbon tetrachloride	50,000	BQL
9	Chlorobenzene	50,000	BQL
10	Dibromochloromethane	50,000	BQL
11	Chloroethane	100,000	BQL
12	2-Chloroethylvinyl ether	100,000	BQL
13	Chloroform	50,000	BQL
14	Chloromethane	100,000	BQL
15	1,1-Dichloroethane	50,000	BQL
16	1,2-Dichloroethane	50,000	BQL
17	1,1-Dichloroethene	50,000	BQL
18	1,2-Dichloroethene (total)	50,000	BQL
19	1,2-Dichloropropane	50,000	BQL
20	cis-1,3-Dichloropropene	50,000	BQL
21	trans-1,3-Dichloropropene	50,000	BQL
22	Ethylbenzene	50,000	450,000
23	2-Hexanone	500,000	BQL
24	Methylene chloride	50,000	120,000 B
25	4-Methyl-2-pentanone	500,000	BQL
26	Styrene	50,000	BQL
27	1,1,2,2-Tetrachloroethane	50,000	BQL
28	Tetrachloroethene	50,000	1,700,000
29	Toluene	50,000	BQL
30	1,1,1-Trichloroethane	50,000	56,000
31	1,1,2-Trichloroethane	50,000	BQL
32	Trichloroethene	50,000	BQL
33	Vinyl acetate	500,000	BQL
34	Vinyl chloride	100,000	BQL
35	Xylenes (total)	50,000	2,800,000

Comments:

BQL = Below Quantitation Limit

Quantitation limit elevated due to sample dilution prior to analysis.

Sample diluted due to high concentration of target compounds present.

B = Compound in blank



IEA Sample Number: 553-009-3  
Sample Identification: 1185  
Date Analyzed: 02/23/90

By: Casto

Number	Compound	Quantitation Limit (ug/kg)	Results Concentration (ug/kg)
1	Acetone	100	BQL
2	Benzene	5	BQL
3	Bromodichloromethane	5	BQL
4	Bromoform	5	BQL
5	Bromomethane	10	BQL
6	2-Butanone	100	BQL
7	Carbon disulfide	5	BQL
8	Carbon tetrachloride	5	BQL
9	Chlorobenzene	5	BQL
10	Dibromochloromethane	5	BQL
11	Chloroethane	10	BQL
12	2-Chloroethylvinyl ether	10	BQL
13	Chloroform	5	BQL
14	Chloromethane	10	BQL
15	1,1-Dichloroethane	5	BQL
16	1,2-Dichloroethane	5	BQL
17	1,1-Dichloroethene	5	BQL
18	1,2-Dichloroethene (total)	5	BQL
19	1,2-Dichloropropane	5	BQL
20	cis-1,3-Dichloropropene	5	BQL
21	trans-1,3-Dichloropropene	5	BQL
22	Ethylbenzene	5	BQL
23	2-Hexanone	50	BQL
24	Methylene chloride	5	6 B
25	4-Methyl-2-pentanone	50	
26	Styrene	5	BQL
27	1,1,2,2-Tetrachloroethane	5	BQL
28	Tetrachloroethene	5	BQL
29	Toluene	5	BQL
30	1,1,1-Trichloroethane	5	BQL
31	1,1,2-Trichloroethane	5	BQL
32	Trichloroethene	5	BQL
33	Vinyl acetate	50	BQL
34	Vinyl chloride	10	BQL
35	Xylenes (total)	5	BQL

Comments:

BQL = Below Quantitation Limit  
B = Compound in blank



## IEA LABORATORY RESULTS

IEA Project #: 553-009  
Client Name: Omni Environmental

Sample #	Client ID	Parameter	Results	Date Analyzed
4	1186	Ignitability	118 F	02/20/90
4	1186	pH	5.0	02/20/90
4	1186	Petroleum Hydrocarbons by GC	1700 mg/kg*	02/25/90
4	1186	Arsenic - EP TOX	<0.50 mg/L	02/28/90
4	1186	Barium - EP TOX	<10 mg/L	02/28/90
4	1186	Cadmium - EP TOX	<0.10 mg/L	03/01/90
4	1186	Chromium -EP TOX	<0.50 mg/L	02/28/90
4	1186	Mercury - EP TOX	<0.0005 mg/L	02/28/90
4	1186	Lead - EP TOX	<0.50 mg/L	02/28/90
4	1186	Selenium - EP TOX	<0.10 mg/L	03/01/90
4	1186	Silver - EP TOX	<0.50 mg/L	02/28/90

## Comments:

\*The sample contains a petroleum hydrocarbon blend with a distillation range similar to gasoline.



REACTIVITY

IEA Sample Number: 553-009-4  
Sample Identification: 1186  
Date Analyzed: 02/21/90

By: Morris

Results

Number	Compound	
1	pH	5.0
2	Reactivity toward water	N/R
3	Sulfide Reactivity	<25 mg/kg
4	Cyanide Reactivity	<0.50 mg/kg
5	Explosive Nature	N/R
6	Overall Reactivity	N/R

Comments:

BQL = Below Quantitation Limit  
N/R = Not Reactive

GC/MS BASE/NEUTRAL EXTRACTABLES  
EPA METHOD 625 COMPOUNDS

IEA Sample Number: 553-009-4  
Sample Identification: 1186  
Date Extracted: 02/26/90  
Date Analyzed: 02/27/90

By: Schemmer

Number	Compound	Quantitation Limit (ug/kg)	Results Concentration (ug/kg)
1	Acenaphthene	4,000	BQL
2	Acenaphthylene	4,000	BQL
3	Anthracene	4,000	BQL
4	Benzo(a)anthracene	4,000	BQL
5	Benzo(a)pyrene	4,000	BQL
6	Benzo(b)fluoranthene	4,000	BQL
7	Benzo(g,h,i)perylene	4,000	BQL
8	Benzo(k)fluoranthene	4,000	BQL
9	bis(2-Chloroethoxy)methane	4,000	BQL
10	bis(2-Chloroethyl)ether	4,000	BQL
11	bis(2-Chloroisopropyl)ether	4,000	BQL
12	bis(2-Ethylhexyl)phthalate	4,000	33,000
13	4-Bromophenyl phenyl ether	4,000	BQL
14	Benzyl butyl phthalate	4,000	BQL
15	2-Chloronaphthalene	4,000	BQL
16	4-Chlorophenyl phenyl ether	4,000	BQL
17	Chrysene	4,000	BQL
18	Dibenzo(a,h)anthracene	4,000	BQL
19	1,2-Dichlorobenzene	4,000	BQL
20	1,3-Dichlorobenzene	4,000	BQL
21	1,4-Dichlorobenzene	4,000	BQL
22	3,3'-Dichlorobenzidine	4,000	BQL
23	Diethyl phthalate	4,000	BQL
24	Dimethyl phthalate	4,000	BQL
25	Di-n-butylphthalate	4,000	BQL
26	2,4-Dinitrotoluene	4,000	BQL
27	2,6-Dinitrotoluene	4,000	BQL
28	Di-n-octylphthalate	4,000	BQL
29	Fluoranthene	4,000	BQL
30	Fluorene	4,000	BQL
31	Hexachlorobenzene	4,000	BQL
32	Hexachlorobutadiene	4,000	BQL
33	Hexachlorocyclopentadiene	4,000	BQL
34	Hexachloroethane	4,000	BQL
35	Indeno(1,2,3-cd)pyrene	4,000	BQL
36	Isophorone	4,000	BQL
37	Napthalene	4,000	16,000



GC/MS BASE/NEUTRAL EXTRACTABLES  
EPA METHOD 625 COMPOUNDS

IEA Sample Number: 553-009-4  
Sample Identification: 1186  
Date Extracted: 02/26/90  
Date Analyzed: 02/27/90

By: Schemmer

Number	Compound	Quantitation Limit (ug/kg)	Results Concentration (ug/kg)
38	Nitrobenzene	4,000	BQL
39	N-Nitroso-di-n-propylamine	4,000	BQL
40	N-Nitrosodiphenylamine	4,000	BQL
41	Phenanthrene	4,000	BQL
42	Pyrene	4,000	BQL
43	1,2,4-Trichlorobenzene	4,000	BQL
44	Benzidine	20,000	BQL
45	N-Nitrosodimethylamine	4,000	BQL

Comments:

BQL = Below Quantitation Limit  
Quantitation limit elevated due to extract dilution prior to analysis.  
Extract diluted due to the presence of non-target compounds.



GC/MS ACID EXTRACTABLES  
EPA METHOD 625 COMPOUNDS

IEA Sample Number: 553-009-4  
Sample Identification: 1186  
Date Extracted: 02/26/90  
Date Analyzed: 02/27/90 By: Schemmer

Number	Compound	Quantitation Limit (ug/kg)	Results Concentration (ug/kg)
1	4-Chloro-3-methylphenol	4,000	BQL
2	2-Chlorophenol	4,000	BQL
3	2,4-Dichlorophenol	4,000	BQL
4	2,4-Dimethylphenol	4,000	BQL
5	2,4-Dinitrophenol	20,000	BQL
6	2-Methyl-4,6-dinitrophenol	20,000	BQL
7	2-Nitrophenol	4,000	BQL
8	4-Nitrophenol	20,000	BQL
9	Pentachlorophenol	20,000	BQL
10	Phenol	4,000	BQL
11	2,4,6-Trichlorophenol	4,000	BQL

Comments:

BQL = Below Quantitation Limit  
Quantitation limit elevated due to extract dilution prior to analysis.  
Extract diluted due to the presence of non-target compounds.

IEA Sample Number:  
Sample Identification:  
Date Analyzed:

553-009(0)-1  
1187  
02/28/90

By: Harris

Number	Compound	Quantitation Limit (ug/L)	Results Concentration (ug/L)
1	Acetone	1,000,000	BQL
2	Benzene	50,000	BQL
3	Bromodichloromethane	50,000	BQL
4	Bromoform	50,000	BQL
5	Bromomethane	100,000	BQL
6	2-Butanone	1,000,000	BQL
7	Carbon disulfide	50,000	BQL
8	Carbon tetrachloride	50,000	BQL
9	Chlorobenzene	50,000	BQL
10	Dibromochloromethane	50,000	BQL
11	Chloroethane	100,000	BQL
12	2-Chloroethylvinyl ether	100,000	BQL
13	Chloroform	50,000	BQL
14	Chloromethane	100,000	BQL
15	1,1-Dichloroethane	50,000	BQL
16	1,2-Dichloroethane	50,000	BQL
17	1,1-Dichloroethene	50,000	BQL
18	1,2-Dichloroethene (total)	50,000	BQL
19	1,2-Dichloropropane	50,000	BQL
20	cis-1,3-Dichloropropene	50,000	BQL
21	trans-1,3-Dichloropropene	50,000	290,000
22	Ethylbenzene	500,000	BQL
23	2-Hexanone	50,000	950,000
24	Methylene chloride	500,000	BQL
25	4-Methyl-2-pentanone	50,000	BQL
26	Styrene	50,000	BQL
27	1,1,2,2-Tetrachloroethane	50,000	1,100,000
28	Tetrachloroethene	50,000	BQL
29	Toluene	50,000	100,000
30	1,1,1-Trichloroethane	50,000	BQL
31	1,1,2-Trichloroethane	50,000	BQL
32	Trichloroethene	500,000	BQL
33	Vinyl acetate	100,000	BQL
34	Vinyl chloride	50,000	1,800,000
35	Xylenes (total)		

Comments:

BQL = Below Quantitation Limit  
Quantitation limit elevated due to sample dilution prior to analysis.  
Sample diluted due to high concentration of target compounds present.

IEA Sample Number: 553-009(0)-2  
 Sample Identification: 1188  
 Date Analyzed: 02/28/90

By: Casto

Number	Compound	Quantitation Limit (ug/L)	Results Concentration (ug/L)
1	Acetone	50,000	BQL
2	Benzene	2,500	BQL
3	Bromodichloromethane	2,500	BQL
4	Bromoform	2,500	BQL
5	Bromomethane	5,000	BQL
6	2-Butanone	50,000	BQL
7	Carbon disulfide	2,500	BQL
8	Carbon tetrachloride	2,500	BQL
9	Chlorobenzene	2,500	BQL
10	Dibromochloromethane	2,500	BQL
11	Chloroethane	5,000	BQL
12	2-Chloroethylvinyl ether	5,000	BQL
13	Chloroform	2,500	BQL
14	Chloromethane	5,000	BQL
15	1,1-Dichloroethane	2,500	BQL
16	1,2-Dichloroethane	2,500	BQL
17	1,1-Dichloroethene	2,500	BQL
18	1,2-Dichloroethene (total)	2,500	BQL
19	1,2-Dichloropropane	2,500	BQL
20	cis-1,3-Dichloropropene	2,500	BQL
21	trans-1,3-Dichloropropene	2,500	BQL
22	Ethylbenzene	2,500	3,700
23	2-Hexanone	25,000	BQL
24	Methylene chloride	2,500	72,000
25	4-Methyl-2-pentanone	25,000	BQL
26	Styrene	2,500	BQL
27	1,1,2,2-Tetrachloroethane	2,500	BQL
28	Tetrachloroethene	2,500	13,000
29	Toluene	2,500	BQL
30	1,1,1-Trichloroethane	2,500	BQL
31	1,1,2-Trichloroethane	2,500	BQL
32	Trichloroethene	2,500	BQL
33	Vinyl acetate	25,000	BQL
34	Vinyl chloride	5,000	BQL
35	Xylenes (total)	2,500	24,000

Comments:

BQL = Below Quantitation Limit

Quantitation limit elevated due to sample dilution prior to analysis.

Sample diluted due to high concentration of target compounds present.

[illegible]



State of North Carolina  
Department of Environment, Health and Natural Resources

Northeastern Region  
1424 Carolina Avenue, Washington, North Carolina 27889

James G. Martin, Governor  
William W. Cobey, Jr., Secretary

Lorraine G. Shinn  
Regional Manager

DIVISION OF ENVIRONMENTAL MANAGEMENT

April 2, 1990

Mr. Jerry Parks  
Hazardous Waste Branch  
Post Office Box 808  
Edenton, North Carolina 27932

Dear Jerry:

Please find enclosed the information regarding the dump site in Ayden, North Carolina. As agreed, in our conversation on March 30, 1990, I will send additional information as it is generated from this office.

If I can be of any further assistance in this matter, please contact me at this office, telephone, (919) 946-6481.

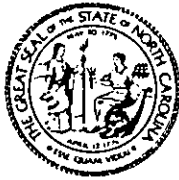
Sincerely,

Patrick Towell  
Hydrogeological Technician

FT:ekw

Enclosure





WARD

State of North Carolina  
Department of Environment, Health and Natural Resources

Northeastern Region  
1424 Carolina Avenue, Washington, North Carolina 27889

James G. Martin, Governor  
William W. Cobey, Jr., Secretary

Lorraine G. Shinn  
Regional Manager

CERTIFIED MAIL  
RETURN RECEIPT REQUESTED

DIVISION OF ENVIRONMENTAL MANAGEMENT  
April 10, 1990

Mr. Carl R. Grantham  
Maintenance Director  
Pitt County Schools  
1717 West Fifth Street  
Greenville, North Carolina 27834

RE: Notice of Violation  
Pitt County Schools Dump Site  
NCSR 1110, near Ayden, North Carolina

Dear Mr. Grantham :

North Carolina General Statutes, Chapter 143, authorizes and directs the Environmental Management Commission of the Department of Environment, Health and Natural Resources to protect and preserve the water and air resources of the state. The Division of Environmental Management has the delegated authority to enforce adopted pollution control rules and regulations.

Based upon a Site Assessment of the Pitt County Schools Maintenance dump site located off NCSR 1110, near Ayden, North Carolina, by Omni Environmental Services, Incorporated, on December 13, 1989, the Division has reason to believe that Pitt County Schools is responsible for activities resulting in noncompliance with North Carolina law.

The investigation conducted by Omni Environmental indicated a measurable amount of organic compounds in the vadose and groundwaters beneath the dump site. All constituents identified in the Omni report exceeded the Groundwater Quality Standards (NCAC 2L). Please refer to the report entitled "Phase I Remedial Investigation, Ayden, NC Disposal Site" dated March 1990.

Notice of Violation  
Mr. Carl R. Grantham  
Pitt County Schools  
Page Two  
April 10, 1990

The specific violations noted are as follows:

Oil Pollution and Hazardous Substances Control Act of 1978 et seq  
(General Statute 143-215.75)

1. G.S. 143-215.83 Discharges  
(a) Unlawful Discharges- It shall be unlawful except as otherwise provided in this part, for any person to discharge, or cause to be discharged, oil or other hazardous substances into or upon any waters, tidal flats, beaches, or lands within this State, or into any sewer, surface water drain or other waters that drain into the waters of this State, regardless of the fault of the person having control over the oil or other hazardous substances, or regardless of whether the discharge was the result of intentional or negligent conduct, accident, or other cause.
2. G.S. 143-215.84 Removal of Prohibited Discharges  
(a) Person discharging - Any person having control over oil or other hazardous substances discharged in violation of this article shall immediately undertake to collect and remove the discharge and to restore the area affected by the discharge as nearly as may be to the condition existing prior to the discharge.

North Carolina Administrative Code Title 15 Subchapter 2L  
Classifications and Water Quality Standards Applicable to the  
Groundwaters of North Carolina

1. NCAC 2L .0103 (d)  
No person shall conduct or cause to be conducted, any activity which causes the concentration of any substances to exceed that specified in Rule .0202 of this Subchapter, except as authorized by the rules of this Subchapter.
2. NCAC 2L .0202 (c)  
Substances which are not naturally occurring and for which no standard is specified shall not be permitted in detectable concentrations in Class GA or Class GSA groundwaters.

Notice of Violation  
Mr. Carl R. Grantham  
Pitt County Schools  
Page Three  
April 10, 1990

Specifically, to correct the above violations, you must perform the following:

1. Conduct an Site Assessment to determine the horizontal and vertical extents of groundwater and/or soil contamination. The assessment should address Sections 1-7 of the attachment entitled, "Outline for Evaluation of Site Characterization Data and Remedial Action Plans for Groundwater Restoration." Be advised that a permit to construct monitoring wells is required from the Department (application attached).

All groundwater and soil samples shall be analyzed as per E.P.A. approved methods. The analytical methods and procedures must be capable of meeting quantitative limits comparable to the values established by E.P.A. for all compounds identified at the site.

Your assessment report must be submitted for review within sixty (60) days of receipt of this letter.

2. Once the assessment is completed, you will be required to submit to the Department for review and approval a Corrective Action Plan (C.A.P.). The C.A.P. must address the recovery and disposal of contaminants, to include all soil, liquid, and dissolved fractions. The plan should also show the location of the disposal site and indicate an approximate timetable for each phase of the job.

Unless it can be demonstrated that residual contamination in the unsaturated zone will not result in violations of underground water quality standards or perpetuate any existing violations, all soils containing contaminants must be removed and/or treated. The proposed plan for the removal and disposal and/or treatment of contaminated soils requires the approval of the Division's Water Quality Section. It is recommended that you call Alton Hodge, Water Quality Section Engineer in the Washington office, for any approvals or permits that may be required for such practices.

Corrective Action Plans submitted to our office for review must be accompanied by all documentation, maps, letters of agreement (for example, disposal site agreement), etc. All analyses, methodologies, monitoring plans, and procedures to be encountered during remediation must be addressed in the C.A.P. To aid you in preparing the C.A.P., please find attached a guide

Notice of Violation  
Mr. Carl R. Grantham  
Pitt County Schools  
Page Four  
April 10, 1990

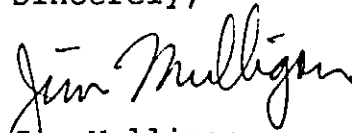
entitled, "Outline for Evaluation of Site Characterization Data and Remedial Action Plans for Groundwater Restoration."

Your Corrective Action Plan must be submitted for review within seventy-five (75) days of receipt of this letter.

Failure to respond within the time specified and to voluntarily achieve compliance may result in the issuance of a proposed penalty assessment by the Director under authority of G.S. 143-215.91, which provides that a civil penalty of not more than \$5,000.00 may be assessed against any person who intentionally or negligently discharges oil or other hazardous substances, or knowingly causes or permits the discharge of oil in violation of G.S. 143-215.7 et seq. If any action or failure to act is continuous, each day may be considered a separate violation.

You should contact us immediately of your intention to comply. Your response and/or questions should be directed to me or to Willie Hardison, Acting Regional Hydrogeologist, at the Northeastern Regional Office at (919) 946-6481.

Sincerely,



Jim Mulligan  
Regional Supervisor

BT:ekw

Enclosures

cc: Office of General Counsel  
Incident Management Unit  
WaRO File ✓

PS Form 3800, June 1989

Date and Address of Delivery	
TOTAL Postage and Fees	
Postmark or Date	

Mr. Carl R. Grantham  
Pitt County Schools  
1717 W. Fifth Street  
Greenville, N.C. 27834

BT:CM P 078 939 390

PS Form 3811, Apr. 1989

DOMESTIC RETURN RECEIPT

<p>7. Date of Delivery</p> <p>4-11-90</p>	
<p>6. Signature - Agent</p> <p><i>[Signature]</i></p>	
<p>5. Signature - Addressee</p> <p><i>[Signature]</i></p>	
<p>3. Article Addressed to:</p> <p>Mr. Carl R. Grantham Maintenance Director Pitt County Schools 1717 West Fifth Street Greenville, N.C. 27834</p>	
<p>4. Article Number</p> <p>P 078 939 390</p>	
<p>8. Addressee's Address (ONLY if requested and fee paid)</p> <p>APR 16 1990</p> <p>D. E. M.</p>	
<p>1. <input type="checkbox"/> Show to whom delivered, date, and addressee's address. (Extra charge)</p> <p>2. <input type="checkbox"/> Restricted Delivery (Extra charge)</p> <p>3 and 4. Put your address in the "RETURN TO" Space on the reverse side. Failure to do this will prevent this card from being returned to you. The return receipt fee will provide you the name of the person delivered to and the date of delivery. For additional fees the following services are available. Consult postmaster for fees and check box(es) for additional service(s) requested.</p> <p>Type of Service:</p> <p><input type="checkbox"/> Insured <input type="checkbox"/> Registered <input checked="" type="checkbox"/> Certified <input type="checkbox"/> Express Mail</p> <p><input type="checkbox"/> Return Receipt for Merchandise</p> <p>Always obtain signature of addressee or agent and DATE DELIVERED.</p>	

SENDER: Complete items 1 and 2 when additional services are desired, and complete items 3 and 4. Put your address in the "RETURN TO" Space on the reverse side. Failure to do this will prevent this card from being returned to you. The return receipt fee will provide you the name of the person delivered to and the date of delivery. For additional fees the following services are available. Consult postmaster for fees and check box(es) for additional service(s) requested.

# POLLUTION INCIDENT/U.S.T. LEAK REPORTING FORM

RECEIVED

Division of Environmental Management  
GROUNDWATER SECTION

APR 11 1990

1. Incident # 5536

2. Tabulate only \_\_\_\_\_

## TYPE OF ACTION

## POLLUTION CONTROL BRANCH

A	1. Emergency Response	3. Complaint Investigation	5. U.S.T. Leak
	2. Compliance Investigation	4. Routine Inventory	6. Other: _____
POTENTIAL HAZARDS: 1. Toxic Chemicals 2. Radioactivity 3. Air Emissions 4. Explosives 5. Fire			

## INCIDENT DESCRIPTION

B	Incident Location/Name <u>Pitt County Schools Maintenance Dept. Dump Site</u>																			
	Address <u>P.O. Box 1296</u>																			
	City/Town <u>Winterville</u>	County <u>Pitt</u>	Region <u>Washington</u>																	
	Briefly Describe Incident <u>An illegal dump by Pitt County Schools Maintenance Dept. was made on an employees farm. Groundwater samples taken from the site revealed specific violations to NCAC - 2L standards</u>																			
	<table border="1"> <tr> <td rowspan="2">Date Incident Occurred or Leak Detected <u>10-28-89</u></td> <td rowspan="2">If L.U.S.T., How Leak Was Detected</td> <td>1. Tank Gauging</td> <td>5. Vapor Monitoring</td> <td>8. Other: _____</td> </tr> <tr> <td>2. Vapor Monitoring</td> <td>6. Tank Removal</td> <td></td> </tr> <tr> <td></td> <td></td> <td>3. GW Monitoring</td> <td>7. Tank Tightness Test</td> <td></td> </tr> <tr> <td></td> <td></td> <td colspan="3">4. Contractor who tightness tested, removed tank or installed leak detection system: _____</td> </tr> </table>			Date Incident Occurred or Leak Detected <u>10-28-89</u>	If L.U.S.T., How Leak Was Detected	1. Tank Gauging	5. Vapor Monitoring	8. Other: _____	2. Vapor Monitoring	6. Tank Removal				3. GW Monitoring	7. Tank Tightness Test				4. Contractor who tightness tested, removed tank or installed leak detection system: _____	
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		3. GW Monitoring	7. Tank Tightness Test																	
		4. Contractor who tightness tested, removed tank or installed leak detection system: _____																		

RECEIVED  
APR 11 1990  
GROUNDWATER SECTION  
RALEIGH, NC

## PERSON REPORTING INCIDENT

C	Name <u>Buddy Bulow</u>	Date <u>10-31-89</u>	Time _____
	Company/Agency <u>D.E.M. - Air Quality</u>	Telephone <u>919-946-6431</u>	
	REPORTED BY: 1. Tank owner/operator 2. Government agency 3. Private (3rd party) 4. Facility owner (Non-L.U.S.T.) 5. Other: _____		

## RECOMMENDED ACTION

D	(MULTIPLE CHOICES POSSIBLE)			
	1. Investigation complete	3. Initiate/complete cleanup	5. Drilling support	7. Confirm leak
	2. Continue investigation	4. Long-term remedial action	6. Issue NOV	8. Monitoring plan
	Comments <u>A complete information package concerning this incident was sent to Jerry Parks with the Hazardous Waste Branch.</u>			
	CLEANUP LEAD 1. Responsible Party 2. State			Site Priority Ranking <u>230</u>
D.E.M. Regional Contact <u>Patrick Towell</u>		Signature <u>Patrick Towell</u>	Date <u>4-2-90</u>	

# POLLUTION INCIDENT/U.S.T. LEAK REPORTING FORM

## POLLUTANTS INVOLVED

E	MATERIALS INVOLVED	AMOUNT STORED OR TANK CAPACITY	AMOUNT LOST	AMOUNT RECOVERED
	<u>Methylene chloride</u>	<u>?</u>	<u>?</u>	<u>—</u>
	<u>1,1-Trichloroethane</u>	<u>?</u>	<u>?</u>	<u>—</u>
	<u>tetrachloroethene</u>	<u>?</u>	<u>?</u>	<u>—</u>

## IMPACT ON SURFACE WATERS

<b>F</b>	WATERS AFFECTED	1. Yes	2. No	3. Potentially	Distance to Stream(ft)
	Fish Kill	1. Yes	2. No		Stream Class
					<u>± 2000'</u>
				<u>Contentnea Creek</u>	<u>—</u>

## IMPACT ON DRINKING WATER SUPPLIES

<b>G</b>	WELLS AFFECTED	1. Yes	2. No	3. Potentially	No. of Wells Affected	No. of Wells Potentially Affected
	Population Served By Affected Wells				<u>NA</u>	<u>?</u>
	Estimated Population Served By Potentially Affected Wells				Aquifer(s) Being Used	
		<u>NA</u>		<u>NA</u>	1. Water Table	2. Confined
					3. Bedrock	

## POTENTIAL SOURCE OF POLLUTION

	PRIMARY SOURCE OF POTENTIAL POLLUTION (Select one)	PRIMARY POLLUTANT TYPE (Select one)	LOCATION	SETTING
<b>H</b>	1. Intentional dump	13. Well	1. Facility	1. Residential
	2. Pit, pond, lagoon	14. Dredge spoil	2. Railroad	2. Industrial
	3. Leak-underground	15. Nonpoint source	3. Waterway	3. Urban
	4. Spray irrigation		4. Pipeline	4. Rural
	5. Land application		5. Dumpsite	
	6. Animal feedlot		6. Highway	
	7. Source unknown		7. Residence	
	8. Septic tank		8. Other	
	9. Sewer line			
	10. Stockpile			
	11. Landfill			
	12. Spill-surface			
	If other sources, list corresponding No's.			
	If multiple pollutant types, list corresponding No's.			
	If PIRF previously submitted for Nonprimary Sources, list Incident No's.			

Confirmed Violation of:

1. 15 NCAC 2L ☒ Yes ☐ No

2. Article 21A Part I ☐ Yes ☐ No

3. Article 21A Part II ☐ Yes ☐ No

4. Federal/State U.S.T. rules ☐ Yes ☐ No

# POLLUTION INCIDENT/U.S.T. LEAK REPORTING FORM

## POTENTIAL SOURCE OWNER-OPERATOR

Potential Source Owner-Operator <b>CARL R. GRANTHAM - Maintenance Director</b>				Telephone <b>919-830-4200</b>	
Company <b>Pitt County Schools</b>			Street Address <b>1717 West Fifth St.</b>		
City <b>Greenville</b>		County <b>Pitt</b>		State <b>N.C.</b>	
Zip Code <b>27834</b>					

U.S.T. REGISTERED 1. YES 2. NO	SOURCE/U.S.T. IN USE 1. N/A 2. YES 3. NO	PERMIT TYPE 0. N/A 1. Non-discharge 2. Oil terminal 3. Landfill 4. Mining 5. NPDES 6. RCRA	OWNERSHIP 0. N/A 1. Municipal 2. Military 3. Unknown 4. Private 5. Federal 6. County 7. State	OPERATION TYPE 0. N/A 1. Public Service 2. Agricultural 3. Residential 4. Educational/Religious 5. Industrial 6. Commercial 7. Mining
FACILITY ID#	SOURCE PERMITTED 1. Yes 2. No			
FEDERAL U.S.T. DESIGNATION 1. Regulated 2. Non-Regulated	PERMIT NUMBER			
STATE U.S.T. DESIGNATION 1. Commercial 2. Non-Commercial	SOURCE ON ERRIS LIST 1. Yes 2. No			
	ERRIS NUMBER			

U.S.T. LEAK PREVENTION MEASURES Was tank retrofitted with overfill protection? 1. Yes 2. No When and by whom? _____ Was tank retrofitted with interior lining? 1. Yes 2. No When and by whom? _____ Was tank retrofitted with cathodic protection? 1. Yes 2. No When and by whom? _____	REASON FOR INCIDENT 1. Transportation 2. Mechanical failure 3. Facility 4. Inventory only 5. Human error 6. Vandalism 7. Unknown
---	---

## ACTIONS TAKEN

J	Investigation, Containment, Cleanup, etc.  <b>(1) Package sent to JERRY PARKS - Hazardous Waste Branch.</b>  <b>(2) PIRF/Blank NOV</b>            Circle Appropriate Responses Lab Samples Taken By:    1. D.E.M.    2. D.H.S.    3. Responsible Party    4. None  Samples Taken Include    1. Groundwater    2. Soil    3. Surface Water
---	--



# LOCATION OF INCIDENT

7 1/2 Min. Quad Name

AYDEN

Lat. : Deg : Min : Sec :

35 24 45

Five Min. Quad Number

Long. : Deg : Min : Sec :

77 27 42

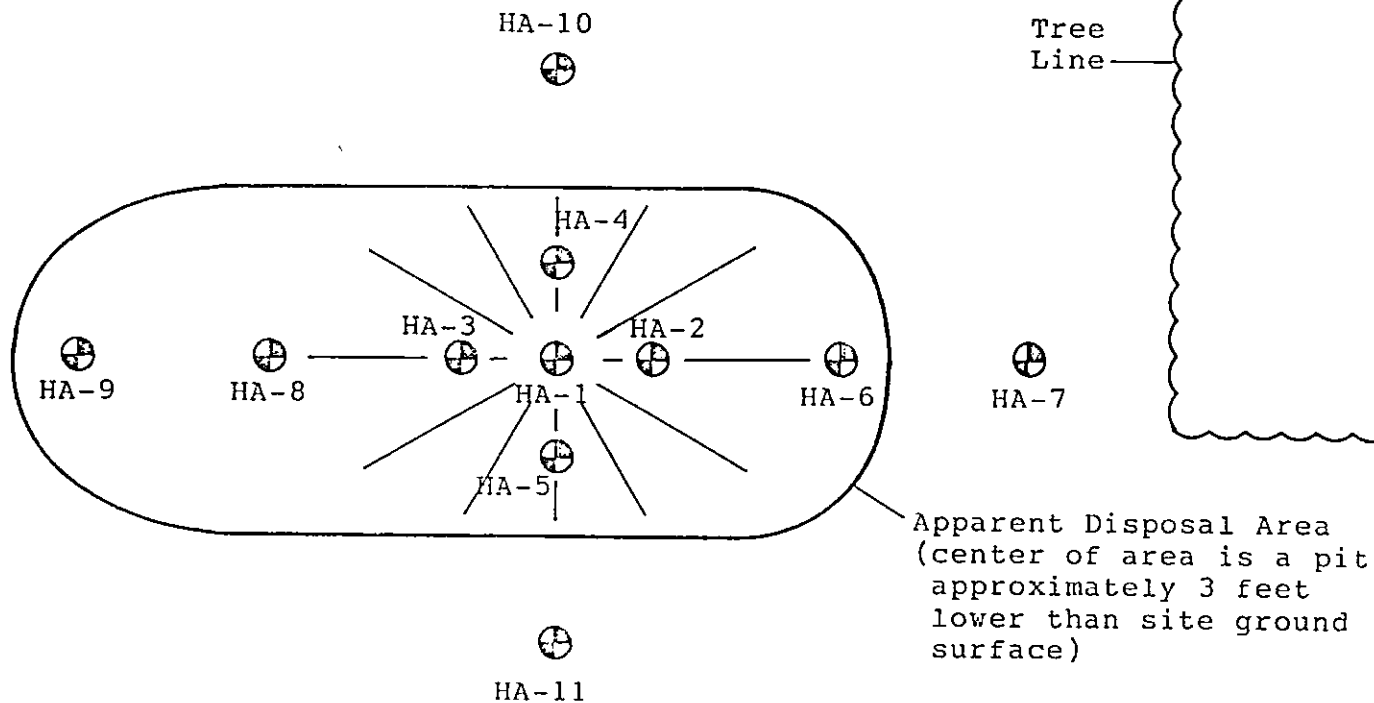
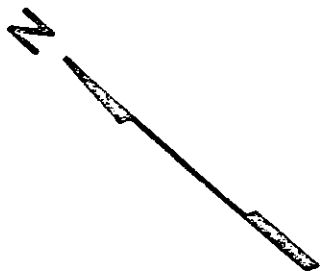
Draw Sketch of Area

SEE Attached maps

K

Sketch Should Identify The Following:

1. Pollutant Source(s)
2. Impacted and Threatened Water Supplies
3. Direction of Overland Flow
4. Significant Recharge and Discharge Features
5. Relative Physical Structures (roads, buildings, etc.)
6. North Arrow
7. Scale



**LEGEND:**

Hand Auger Boring ⊕

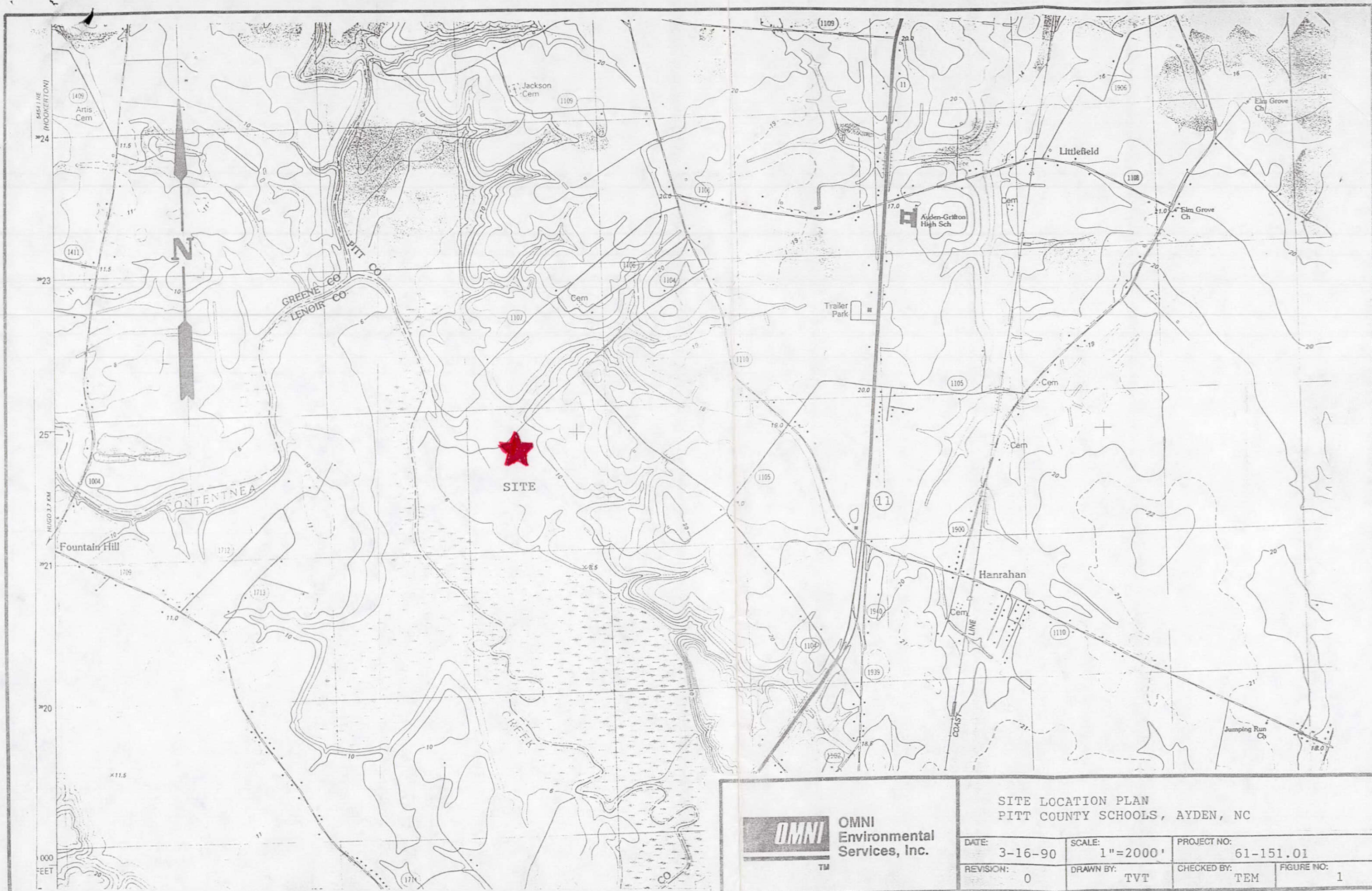


OMNI  
Environmental  
Services, Inc.

SAMPLE LOCATION MAP  
PITT COUNTY SCHOOLS, AYDEN, NC

DATE: 3-19-90	SCALE: 1"=20'	PROJECT NO: 61-151.01
REVISION: 0	DRAWN BY: TVT	CHECKED BY: TEM
		FIGURE NO: 2





SITE LOCATION PLAN  
PITT COUNTY SCHOOLS, AYDEN, NC

DATE:	3-16-90	SCALE:	1"=2000'	PROJECT NO:	61-151.01
REVISION:	0	DRAWN BY:	TVT	CHECKED BY:	TEM
				FIGURE NO:	1



Incident Name Pitt County Schools maintenance Dept. Duty  
Region/County Washington / Pitt  
Groundwater Incident File # \_\_\_\_\_  
Ranking Performed by B. Towell Date 4-2-90

NORTH CAROLINA

GROUNDWATER CONTAMINATION INCIDENT MANAGEMENT  
SITE PRIORITY RANKING SYSTEM

Points  
Awarded

I. IMMINENT HAZARD ASSESSMENT

- A. Explosion - free product in confined areas or vapor phase product detected at or above 20% of the lower explosive limit; award 50 points total
- B. Fire - free product subject to ignition in exposed areas such as surface water impoundments, streams, excavations, etc.; award 50 points total

0

0

II. EXPOSURE ASSESSMENT

A. Contaminated Drinking Water Supplies

1. Private, domestic water supply well containing substances in concentrations exceeding Class GA underground water quality standards; award 10 points per well
2. Public or institutional water supply well containing substances in concentrations exceeding Class GA underground water quality standards; award 30 points per well
3. Exceedences of Class WS-1 surface water quality standards as a result of groundwater discharge; award 20 points per surface water body impacted
4. If a water supply well identified in items II.A.1 and II.A.2 cannot be replaced by an existing public water supply source requiring hook-up only; award additional 10 points per irreplaceable well

0

0

0

0

B. Threat To Uncontaminated Drinking Water Supplies

1. Private, domestic water supply well located within 1500 feet downgradient of contaminant source; award 10 points per well 0
2. Public or institutional water supply well located within 1/2 mile downgradient of contaminant source; award 15 points per well 0
3. Raw surface water intake for public water supply located within 1/2 mile downgradient of contaminant source; award 5 points per water supply system 0
4. If any well identified in items II.B.1 and II.B.2 is located within 250 feet of contaminant source; award additional 20 points total 0

C. Vapor Phase Exposure

1. Product vapors detected in inhabitable building(s); award 30 points total 0
2. Product vapors detected in other confined areas (uninhabitable buildings, sewer lines, utility vaults, etc.); award 5 points total 0

III. CONTAMINANT HAZARD ASSESSMENT (chemical groups are categorized based on toxicity, mobility and persistence in the environment). Evaluate the most hazardous substances detected and select only one of the following:

- A. Award 30 points total if contaminants detected are identified with any of the following groups: 30

1. Aromatic (Benzene) Acids
2. Aromatic Hydrocarbons (Benzene Derivatives)
3. Sulfonated Hydrocarbons
4. Halogenated Hydrocarbons
5. Alkaloids
6. Anilines
7. Phenols
8. Aldehydes
9. Ketones
10. Organic Sulfur Compounds (Sulfides, Mercaptans)
11. Organometallic Compounds

12. Cyanides
13. Esters
14. Metal Salts, Including Heavy Metals

B. Award 20 points total if contaminants detected are identified with any of the following groups:

NR

1. Aliphatic (Fatty) Acids
2. Alcohols
3. Aliphatic Hydrocarbons (Petroleum Derivative)
4. Pyridines
5. Thiocyanides
6. Mineral and Metal Acids
7. Mineral and Metal Bases
8. Oxides
9. Sulfides

C. Award 10 points total if contaminants detected are identified with any of the following groups:

NR

1. Aliphatic Amines and Their Salts
2. Sugars and Cellulose
3. Carbon and Graphite

#### IV. SOURCE ASSESSMENT

A. Free product thickness of  $\geq 1/4$  inch detected on water table in observation or monitoring well; award 20 points total

0

B. Contaminated Soil (select only one answer)

1. Soil saturated with product (saturation determined by release of free liquid upon compaction of a soil sample by hand pressure); award 10 points total

0

2. Soil exhibiting organic vapor content above 100 ppm as measured by organic vapor or volatile organic detection equipment; award 5 points total

5

C. Uncontrolled or Unabated Primary Source (including dumpsites, stockpiles, lagoons, land applications, septic tanks, landfills, underground and above ground storage tanks, etc.)

1. Suspected or confirmed source remains in active use and continues to receive raw product, wastewater or solid waste; award 20 points per source

0

2. Active use of suspected or confirmed source has been discontinued or source was caused by a one-time release of product or waste, however, source continues to release product or contaminants into the environment; award 10 points per source

150

V. ENVIRONMENTAL VULNERABILITY ASSESSMENT

- A. Vertical Contaminant Migration - Literature or well logs indicate that no confining layer is present above bedrock or above twenty feet below land surface; award 10 points total

10

- B. Horizontal Contaminant Migration - Data or observations indicate that no discharge points or aquifer discontinuities exist between the source and the nearest downgradient drinking water supply; award 10 points total

10

- C. Hydraulic Gradient Is Determined By (select only one answer):

1. Calculations based on groundwater level measurements; award 10 points total
2. Observation of significant recharge/discharge features in the vicinity of contaminant source and local topographic features; award 5 points total
3. Observation of local topographic features only; award 0 points

0

5

0

- D. Existing Groundwater Quality

1. Analytical test(s) performed on groundwater sample(s) obtained from site confirm presence of substances in concentrations exceeding Class GA underground water quality standards; award 10 points total

10

2. Source(s) identified in Section IV constitute the only known source(s) of contamination resulting in exposure or potential exposure identified in Section II; award 10 points total

10

TOTAL POINTS AWARDED

230

PLEASE NOTE THE FOLLOWING CHANGES TO THE GW INCIDENT RANKING FORMS :

- 1) IN SECTION II-A-2, AWARD 30 POINTS IF A CENTRAL SUPPLY IS AFFECTED. EXAMPLE- A SERVICE CONNECTION BETWEEN A CITY MAIN AND A HOUSE HAS FAILED AND ALLOWED CONTAMINANTS TO ENTER
- 2) IN SECTION II-C-1&2, AWARD POINTS FOR EACH BUILDING, LINE, OR UTILITY VAULT AFFECTED.
- 3) IN SECTION V-C-3, THE OBSERVATION OF GRADIENT BASED ON THE LAY OF THE LAND IS 0 POINTS.